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AN
ESSAY
ON
LABORIOUS PARTURITION:
IN WHICH THE
DIVISION of the SYMPHYSIS PUBIS
IS
PARTICULARLY CONSIDERED.

REQUIRERE ETIAM, SI RATIO IDEM DOCEAT, QUOD
EXPERIENTIA, AN ALIUD. CELSUS. PRÆF. P. IO.

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T O
His Grace the Duke of DORSET,

P R E S I D E N T:

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T H E O T H E R G O V E R N O R S

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I N

S T O R E S T R E E T,

T H I S E S S A Y I S I N S C R I B E D,

A S

A T E S T I M O N Y O F G R A T I T U D E A N D R E S P E C T,

B Y T H E

A U T H O R.

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P R E F A C E.

ALTHOUGH in a *system* of midwifery, it is essentially necessary to consider the various degrees of difficulty, included in the general technical term of *Laborious Parturition*; yet it does not come within the intention of this *Essay*, to treat of any other, than that degree only, which depending on the distorted form, and diminished capacity of the

pelvis, is incompatible with the safety of both mother and child. In this case, the life of the child must of necessity be sacrificed to the preservation of the mother, or the mother herself, for the certain safety of her child, must be doomed to inevitable destruction by the *Cæsarian operation*; or for a precarious chance, and the slenderest probability of safety to her child, she must at least be exposed to the pain and danger of the *Division of the symphysis pubis*. This last operation was lately invented, and performed at Paris by Monsr. Sigault, with an intention to supersede the necessity of the Cæsarian section, and infallibly to preserve both parent and child; and as it has much engaged

gaged the attention, and divided the opinions of medical men throughout the Continent; one chief purpose of this essay, is candidly to review that subject, and to inquire, how far it has answered the sanguine expectation of its first friends, or *how far experience has corresponded with theory*, by collecting the history and events of all the cases in which it has been performed, and presenting them to my readers, as the only satisfactory evidence, which can determine the genuine merit of this, or any other invention.

Previous however to this inquiry, I shall first endeavour to obviate some objections, deduced from analogy, and speciously ap-

plied to depreciate the science of midwifery, by demonstrating the physical necessity of the difficulties and dangers in human parturition, because dependent on the very form and position of our body.

I shall then proceed to make some observations on laborious parturition, but passing by, (at least upon the present occasion) all the inferior degrees of deformity and difficulty, I shall first describe, and ascertain, those dimensions of the pelvis, which absolutely, and in all cases require, to accomplish delivery, such violence, as is inconsistent with the common safety both of mother and child. I shall next, by comparing the value of the two lives,
placed

placed by lamentable necessity in competition, endeavour to prove, that our usual practice of opening the child's head, and thereby lessening its volume, so as to permit it to be extracted with the crotchet, instead of deserving those opprobrious and injurious terms, so unjustly applied to it by many foreign professors, and some authors of this country, is infinitely preferable to any operation, which must at least expose the mother to extreme danger, if not inevitable destruction.

I shall lastly, endeavour to shew, and confirm by a late case, that a child at full maturity, and of the ordinary size, may, with its head opened,

be extracted by a crotchet, with perfect safety to the mother, through a much smaller, and more distorted pelvis, than has hitherto been supposed capable of admitting such delivery; the pelvis in the case alluded to, being considerably smaller, than where the Cæfarian operation is invariably advised, and has been very often performed, and infinitely smaller, than where the division of the symphysis is even recommended. Thus I hope, almost to supersede the necessity of the one operation, and altogether prevent the performance of the other.

In the second part, where I give an historical detail of the division of the symphysis pubis, and the event

event of the cases in which it has been performed, I have been obliged to make such frequent and long quotations, as perhaps in the opinion of some readers, may require an apology, (while probably the greater number with myself, will think them the best and most important part of this essay), but the apology may be deemed more necessary, as I have departed from the usual manner of throwing the quotations, in the form of notes, to the bottom of the page, and have introduced them into the body of the work. I beg leave however to observe on this occasion, that the books from which I have taken my accounts are not very common, and the passages quoted are in general
either

either curious, or important in matter, or expression. It may be likewise necessary to state, that as the books are all in Latin or French, languages universally understood, and indeed familiar to the medical reader, (for whom alone this work is intended), I have preferred the very words of the author, rather than a translation, as precluding all misrepresentation or perversion, and even the possibility of mistake. By interweaving the quotation into the body of the work, the narration continues undisturbed, and the confusion and interruption of frequent and repeated references are entirely obviated.

It is impossible to enter upon the consideration of the subject
of

of this essay, without feeling, and lamenting the calamitous condition of the Sex, who at all times of parturition, are exposed to the severest bodily pain, but who, in this case, are inevitably reduced to the cruellest alternative that imagination can conceive. An alternative, the more deplorable, as woman is the only created being who is subject to it, and the misery of which is not produced by human vice, nor can it be prevented by human prudence; while the humblest of the sex; therefore, have the strongest and most complicated claim upon our benevolence and skill; the general welfare of society calls for our best endeavours to lessen the affliction; and let me hope, that
the

the humanity, and usefulness of the intention, will plead in extenuation of every fault, in the execution of such an attempt.

E R R A T A.

- Page 3, note, line 2, for *perspererunt*, read *perspexerunt*.
 P. 44, l. 3, for *who*, read *which*.
 P. 64, l. 7, for *are*, read *were*.
 P. 98, l. 7, for *scarce*, read *scarcely*.
 P. 106, l. 2, after *favour*, add *of*.
 P. 137, l. 17, for *advisible*, read *advisable*.
 P. 145, l. 6, for *prothetically*, read *prophetically*.
 7, for *clapsam*, read *elapsam*.
 P. 149, l. 11, for *have*, read *has*.
 P. 157, l. 15, for *præcepue*, read *præcipue*.
 P. 175, l. 22, for *ligne*, read *lignes*.
 P. 209, l. 4, for *cartillage*, read *cartilage*; and in different parts of the work, for *medicine*, read *medicine*.

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S E C T I O N I.

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Mons. Le Roy, approved by the Faculté de Médi-
cine de Paris, and recommended by them to the pub-
lic. Mons. Sigault rewarded in a singular manner.
The

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INTRODUCTION.

THOUGH the art and science of midwifery, have been more cultivated throughout Europe, since the commencement of the present century, than during any preceding period, yet its progress has hitherto by no means corresponded with the importance of the subject, or our advances in other branches of the practice of medicine. This, I believe, may be accounted for in the following manner. Many sensible and well-informed persons, and even

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some philosophers and physicians*, observing with what facility, and almost total exemption from danger, all animals in a state of nature bring forth their young, have presumed, from analogy, that human parturition, if conducted by nature alone, would be accomplished with equal facility and safety. From this opinion, which, for want of observation, is founded on a superficial and imperfect knowledge of the subject, they have hastily drawn conclusions unfavourable to the art of midwifery, and injurious to the interests of humanity; because as far as their influence extends, they have a direct tendency to prevent or obstruct all further improvements in this profession, as unnecessary and useless†.

To

* “Every other animal brings forth its young, without any assistance; but we think a midwife understands it better,” &c.

See Dr. Gregory’s Comparative View of the State and Faculties of Man, p. 22.

† “Artem obstetricam, futilem, inanem, imoque ut exitiosam habent viri cætera eruditissimi,
“ qui

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To point out the fallacy of these opinions, and to obviate their influence, by demonstrating the superior difficulty and danger of human parturition;—to rescue midwifery from the imputation of inutility, and to restore it to the importance which it merits, are the particular objects of this introduction.

That all animals in a state of nature, bring forth their young with greater ease, and safety, than women, who are assisted by art, is a fact incontrovertibly established by general observation. If it cannot therefore be shewn, that this circumstance arises from an essential difference between the structure of the human body, and that of quadrupeds; and that human parturition, under the

“ qui ea omnia scepticé negant quorum commoda ipsissimis oculis non perspexerunt;” as Mons. Roussel de Vauzefme observes even in France, where midwifery has been more attended to than in any country of Europe.

De Sectione Symphyseos Ossium Pubis admit-
tenda. Auctore August. Roussel de Vau-
zefme, Lutetiæ. Paris. 1778.

4 INTRODUCTION.

most favorable concurrence of circumstances, or natural labour, must, of necessity, be more tedious, difficult, and painful, than the same operation in any other animal; the professor of midwifery ought undoubtedly to acquiesce in the opinion referred to above, which considers his art as “useless, trifling, “and perhaps sometimes hurtful.”

But should it, on the other hand, admit of demonstration, that there is such a powerful, and permanent cause inseparably connected with, or rather dependent upon, the most perfect form and structure of the human body, which clogs even natural parturition with many impediments: and if it can be further shewn, that there is a disease peculiar to the human species, which lays the foundation for innumerable difficulties and dangers in parturition, which are unknown in the quadruped; then the opinions, and conclusions I have mentioned above, will appear to be falsely or superficially formed, and the charge of inutility must be rejected, as ill founded and

and unjust. Indeed, it will be immediately evident, that midwifery, whilst it professes only to superintend the act of parturition, to co-operate with nature, and to assist her when necessary, is an art extremely beneficial to mankind. But midwifery, in its most extensive meaning, comprehends the medical direction and treatment of women from the beginning of the pregnant, to the conclusion of the puerperal state, as well as the superintendence of the act of child-bearing. If we therefore take into consideration, the variety of painful, dangerous, and complicated situations and diseases in which it affords relief: and if we estimate, as we ought, the high and peculiar importance of the subjects of this art, from their acknowledged consequence to the happiness of mankind, and even to the existence of the world; we may surely venture to assert, that midwifery ought to be considered, not as a subordinate, but as one

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of the most important parts of the medical art.

Having affirmed, that there is an essential difference between human parturition, and the same operation in every other female: it will first be necessary to describe, in what that difference consists; and then to shew, by what means it happens, that painful, difficult, dangerous, and even sometimes fatal parturition should be the unhappy lot of woman only, while all other creatures are in a great measure, if not altogether, exempt from every untoward circumstance, which either accompanies or follows the act, and which constitutes the misery of child-bearing.

If we admit, that human parturition was distinguished by the severity of its pains, by its difficulty and dangers, from the same operation in other animals, as a curse annexed to the fallen nature of man; and that “in sorrow
“thou shalt bring forth children,” was announced to our first parent as a punishment—

nishment, which, we are taught, it was the intention of the Deity should continue to afflict human nature as long as the world endured—It will serve to illustrate one particular subject of this introduction, may gratify philosophical curiosity, and at least have a beneficial tendency*, if not be a matter of much practical utility, to enquire by what means peculiar to the human physiology, this great natural evil has been so completely effected, and must continue to be so inevitably annexed to the female body.

We are repeatedly told, from the highest authority, that “ God made man in his own image, and after his own likeness.” Expressions, which, if not at all referrable to external shape, yet, as the God of nature has been pleased in his wisdom and goodness, to give to the human species,

* “ *Ista quoque naturæ rerum contemplatio, quam vis non faciat medicum, aptiorem tamen medicinæ reddit.*”

Cels. lib. i. Præf. p. 14.

a form and position of body, differing from those of all other animals, they must be understood to convey the most unequivocal mark of distinction and pre-eminence, over all orders of terrestrial beings: and this peculiar form of body, the "*erectus ad sidera vultus*," ought of course to be regarded as a transcendent benefit or blessing to human creatures. Notwithstanding which, such is the divine intention in the œconomy of this world, such the imperfect state of every sublunary good, that certain inconveniences, necessarily result from, or are inseparably attached to, every great advantage, or every acknowledged excellence. Thus the peculiar position of the human frame, that singular mark of pre-eminence, exposes woman to pain and difficulty in natural parturition, from which the subordinate quadruped is almost entirely exempted, by the horizontal position of her body. The peculiar advantages of positions so different from each other, can no more
 exist

exist in the same creature, than the strength of the draft horse and the fleetness of the racer, can be united in the same animal; as these depend on qualities incompatible with each other, and which cannot exist together in the same subject, so those depend on circumstances of structure, or physical laws equally incompatible and inconsistent.

To understand how the erect position of body necessarily operates, in making natural labour in women more painful, tedious, and difficult, than in the quadruped, it is sufficient to observe, that in such a situation, there is the general, and powerful influence of gravity constantly to counteract; in a certain degree, during the whole period, but in a much greater degree, towards the conclusion of utero-gestation; for as gestation advances, the ability in the soft parts to resist the influence of gravity regularly decreases: and thus, if not prevented, premature labour would be the inevitable consequence.

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Completely to guard against this accident, which is of the last importance to the existence of mankind, nature has taken peculiar pains, and attended to a variety of circumstances in the structure of the bodies, both of mother and child, which while they effectually answer the purpose intended, unavoidably create those very obstacles which delay and impede delivery. The most material of these circumstances it may be proper to describe.

First then, that irregular cylindrical cavity in the skeleton, called the pelvis, through which the fœtus in all animals must pass, is so placed in the human body, that its axis is very different from the axis of the trunk, and of course not perpendicular to the horizon, nor can any-thing therefore passing through it be within the immediate influence of gravity; at the same time, the axis of the pelvis is very remote from, if not directly opposite, to the axis both of the vagina, and os-externum, through which the fœtus must ultimately pass.

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Secondly. Upon the same principle and with the same view, nature has been obliged to vary, nicely and minutely, both the form and capacity of the pelvis, making it wide in one part, narrow in another, concave and deep behind, straight and shallow before, and with sides that converge to a considerable degree.

Thirdly. The upper and lower aperture of the pelvis do not at all correspond in shape, and have directly opposite diameters. The superior aperture or brim of the pelvis, where the child enters, is ovi-form*, with the long diameter extending from side to side. The inferior aperture, through which the child is to pass out, is so irregular as not to admit of a comparison, or illustration, from any known form, but is certainly shorter from one side to the other, than from the fore to the hind part; and that, nearly in the same proportion as it was lon-

* I only mean as having two different diameters.

ger above: thus the two apertures have directly opposite diameters.

Fourthly. Pursuing the same intention, nature has made the volume of the child's head such, compared with the cavity of the pelvis, that it cannot enter by its own weight, but requires the powerful and repeated contractions of the uterus and abdominal muscles, and even then, the head must be of a particular form, and in a particular direction; that in the passage, both these necessarily undergo a material change from compression, that the shape of the head may be all through adapted to the cavity of the pelvis; and thus it must consequently come out with an altered form, and in a different direction.

Lastly. To add to the more effectual support of the gravid uterus during gestation, all the soft parts concerned in labour, are of a firm and rigid texture, dilating at all times with considerable, but the first time with extreme difficulty, to such a degree, as to permit the passage
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of the child through them without laceration, or other injury. It is obvious that these circumstances must render the act of child-bearing slow, difficult, and painful.

Let us now consider the peculiarities of the quadruped, and their operation in labour.

By the horizontal position of the body of the quadruped, the parietes of the abdomen support the gravid uterus during gestation, in whatever situation the animal may be; the parts concerned in labour, cannot therefore at any time be exposed to the general influence of gravity; on which account, nature was not required to observe such strict laws, or be attentive to such minute deviations, respecting either the position, or capacity of the pelvis, the volume, or form of the head of the fœtus, the situation, or structure of the soft parts. Therefore the same, or very nearly the same axis is given to the trunk, the pelvis, the vagina, and the os-externum; nature

ture has likewise made the head of the fœtus proportionably small, compared with the capacity of the pelvis, so that it may readily pass through in any direction; and the soft parts, having nothing to support, are of a loose texture, easily yielding to the first pressure of the membranes, or fœtus, and of course affording little resistance, and no impediment to delivery.

This difference in the structure of the soft parts likewise satisfactorily explains, why the laceration of the perinæum, which, from inattention, or ignorance of the person attending, is no uncommon accident in human parturition, should never happen to quadrupeds; a circumstance which has been considered by some as a strong proof of the superiority of the powers of unassisted nature, over all the care and exertions of art.

By this sketch of human and comparative parturition, it is evident, why the same operation under the most favourable circumstances, or natural labour, must
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in women be attended with much more pain, difficulty, and delay, than in any other creature. It remains now to be explained, why laborious parturition never did, or can occur to the quadruped.

It is well known, that the great and genuine cause of difficult and laborious births, is the deformity of the pelvis, or the disproportion of its cavity to the volume of the child's head, and that this deformity is caused by a disease peculiar to the human species, called in infancy the Rachitis, and in the adult state the Mollities ossium; in both which cases, there is such a deficiency of earthy matter in the skeleton, as to render the bones insufficient to support the weight of the body, or sometimes, the action of the muscles. In the infantile disease, the secretion and lodgment of the earthy matter having never been effected, the formation of the bones is incomplete; in the adult state, although the process has been accomplished and the skeleton been perfectly formed, yet where first a solution,

tion, and afterwards an absorption of this matter takes place, and it is conveyed by the urinary passage out of the body; and the bones in consequence lose their firmness and stability; in either case the effect is the same, and if the disease is general, to which there may be some, but I believe very rare exceptions, those bones must suffer most, and first, which support the greatest weight, or are most exposed to muscular action. Now the part of the human skeleton, or single bone*, which sustains the greatest weight, is the basis of the os sacrum, at its union with the last lumbar vertebra, for whether the body be walking, standing, or sitting, this part forms the base of the column, and must first give way, if the superincumbent weight and pres-

* I say single bone, because the whole pelvis is engaged in the support of the trunk; and my friend, Dr. Denman, has very ingeniously described it as a double arch, admirably contrived by nature to support the superincumbent weight, and to give peculiar strength to the human frame. See introduction to the practice of Midwifery, p. 29.

sure be too great for the column to sustain. This assertion is fully confirmed by anatomical observation. For, infinitely the greater proportion of deformed pelvises are found, if not only, always most contracted at this part; an incontestible proof, that it first gives way, or is most under the influence of this disease, and when once affected, is with greater difficulty restored to its pristine state.

The Rachitis or mollities ossium, so far as my observation extends, is a disease peculiar to the human body, to which quadrupeds, under no circumstances, are ever subject; however, if they were, as from the horizontal position of their bodies, the pelvis sustains little or no weight, so is that a part of their skeleton, which cannot be at all exposed to the influence of this disease. Hence, as there is no such thing as a deformed pelvis among quadrupeds, so there never can happen to them any of

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those difficulties or dangers, which, depending on deformity, constitute laborious parturition, to an almost endless variety of degrees in the human species.

From this description, it must be obvious to every reader, that unless in the end or effect, scarce any analogy can with propriety be said to exist in an operation, so widely differing as parturition does, in many of the most essential circumstances. The opinions therefore, which have been hastily adopted, and the conclusions, which have been ignorantly, or inconsiderately drawn from this supposed analogy, must appear to be absolutely unwarrantable.

I cannot here refrain from observing, what may perhaps appear too obvious to require notice; that as the rickets is a disease very common in infancy, so the pelvis is very early, and frequently deformed; and for the reasons stated above, long before the spine, or any
other

other part of the skeleton, is really, or apparently affected. I believe, that when once the pelvis is much deranged, it is very rarely, and with great difficulty, again restored to its perfect form, and size; which is confirmed by frequent observation of women, who are both tall in stature, and well formed in the spine, and yet have the pelvis much contracted at its upper aperture. As it is of the first consequence, so it requires our earliest and best endeavours, in female children, to check the progress of this disease, before the deformity be considerable, and long before it arrive at such a degree, as to threaten that species of difficulty in delivery, which is the subject of the following essay.

To discriminate with precision the various degrees of deformity, and consequently of difficulty, in laborious parturition, and to apply, in proper time, the means of art, best adapted to give relief in each, with safety both to mother, and

child, where the circumstances of the case admit; but with an invariable preference to the mother, where the safety of both is incompatible, constitutes, the most important branch of the practice of midwifery. The life of the child, and the safety, health, and future comfort of the mother, very much, if not altogether depend in such cases, on the skill, and attention of the operator, and the timely application of his art; his professional conduct therefore, is most intimately connected with the interests of humanity, and the welfare of the community.

I cannot therefore, I think, conclude this introduction more aptly, than by recommending to the serious consideration of my young readers, Celsus's description of the extreme difficulty and danger attending that degree of laborious parturition, which is the subject of the following essay, but particularly his concise description of those qualities in the operator, essentially required

quired to obviate the one, and prevent the other.

“ QUÆ NUMERARI INTER DIFFICILLIMAS PO-
 “ TEST, NAM ET SUMMAM PRUDENTIAM, MODE-
 “ RATIONEMQUE DESIDERAT, ET MAXIMUM PERI-
 “ CULUM AFFERT.” Cels. lib. vii. cap. 29.

A N
E S S A Y
O N
LABORIOUS PARTURITION.

C H A P T E R I.

S E C T I O N I.

BY the general term of laborious parturition, we mean the protraction of a natural labour much beyond the usual period, which is always attended with great difficulty, and some times with danger.

I have already in the introduction, endeavoured to explain why the volume

of the child naturally bears such an exact proportion to the capacity of the pelvis, as that it can never enter, and pass through that cavity, without considerable pain, and some difficulty, and if by any means, that due relation is interrupted, delay and danger must attend parturition to an endless variety of degrees.

To prevent, or remedy the present inconveniences, or future consequences, arising from the inferior degrees of disproportion, the head of the human foetus, it is well known, is incompletely ossified at birth; nature having with admirable wisdom, by means of sutures and fontanelles, so constructed it, that in the passage through the pelvis, it may suffer the form to be altered, and the volume to be considerably diminished, without such injury to its contents, as shall necessarily destroy life. Yet as there is one volume, beyond which the foetal head cannot suffer compression with safety, so there is another and still smaller volume, into which it
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cannot be compressed at all, unless it be first opened, the contents discharged, and the bones by that means be permitted to collapse.

Whenever the pelvis is so distorted in its form, and so contracted in its capacity, as not to permit the head of the child to pass unopened, it constitutes that degree of laborious parturition, which is the particular subject of this essay. Passing by then the inferior degrees of difficulty, where either in the first instance, the powers of nature, though slowly, and with great and continued exertions, are yet ultimately equal to the accomplishment of the delivery; and the next degree described by systematic writers, as requiring the assistance of the forceps, or vectis; by which the life of the child is capable of being preserved; I will endeavour to ascertain as accurately as the nature of the case renders practicable,

First, What are the absolute dimensions of the pelvis, which in all cases must

must inevitably require the head of the child to be opened, and its volume to be lessened; or where, either the Cæsar-ian operation, or the division of the symphysis pubis must be performed.

Secondly, I will endeavour to ascertain with the same degree of accuracy, founded upon principle, determinable by mensuration, and confirmed by a well known case, what are the smallest dimensions of the pelvis through which a child can be extracted with a crotchet, when the head is thus opened, the contents discharged, and the bones collapsed.

The first, with a view to induce an early commencement of this operation when necessary; for upon that altogether depends the facility, and in a great degree, even the safety of the subsequent delivery.

The second, with the intention of preventing the unnecessary performance of the Cæsar-ian operation, but most especially,

pecially, and in all cases, to prevent the division of the symphysis pubis.

Though we can readily determine by the introduction of the fingers into the vagina, what are the absolute dimensions of the pelvis, yet the relation between these dimensions and the volume of the child's head, is not determinable with geometrical precision; as there is a considerable variety in the size of the human fœtus, and it is impossible to know the exact size of any head while it remains in the uterus. Further; one head may perhaps, by its original construction, be able to bear compression better, or with less injury to the contents, than another head: various other circumstances too, which cannot be known, probably sometimes make a considerable difference; at least it is an undoubted fact, confirmed by daily observation, that some children come alive into the world, while others are still-born, and yet the circumstances of the labour, and as far as we are able to judge, the structure
both

both of mother and child, shall be apparently the same.

Notwithstanding all these varieties; notwithstanding the utter impossibility of arriving at absolute precision; yet, we are certainly in possession of the means of determining, with every degree of exactness necessary to direct our future practice, in the safest and best manner. These means may be reduced to one point, determinable by mensuration, which is the more necessary, as I know of no author, even among the latest and best writers on this subject, who has yet done it with sufficient accuracy and decision. All their expressions concerning the dimensions of the pelvis, and the consequent practice, are so vague, that they leave each reader to his own interpretation, either to determine the one, or direct the other*.

The weight of a new-born child, at full time, varies from rather less than six, to ten, and even at other

* See Smellie, Levret, Saxtorph, Roederer, &c.

times to twelve pounds; the size of the first being small, of the last unusually large†. The head of the child, the only part we are interested about on this occasion, of course varies in equal proportion. By innumerable experiments accurately made, and I know, faithfully related, because repeated by myself, the small diameter of a child's head, or that which passes from one parietal bone to the other, measures at birth, from three inches and a half*, to upwards of four inches. One may therefore venture to pronounce, that the fœtal head, at full maturity, cannot bear compression to a volume much smaller than three inches, from one parietal bone to the other, consistently with safety to the child's life. Through a pelvis, which has its cavity naturally so contracted, or which is by disease so distorted in any part, as that

† See Roederer's *Opuscula*, vol. I. p. 32. *Dissert. de Temporum, in Graviditate & partu, æstimatione.* Auctore J. F. G. Dietz.

* Burton, Windius, Camper.

the bones approach much nearer to each other than three inches, it is utterly impossible for a living child, at full maturity, by any means to pass†.

To be precise; whenever a woman falls into labour, the small diameter of whose pelvis measures only two inches and three quarters; one or other of the following circumstances must take place.

First, The child's head must be opened, and the contents discharged, that the bones may be permitted to collapse; and the volume being thus diminished, it may afterwards be extracted with the crotchet. Or,

Secondly, For the certain preservation of the child's life, the mother must be doomed to inevitable destruction, by the Cæsarion operation. Or,

Thirdly, As a mean between the two extremes, the mother must submit to the section or division of the symphysis

† Levret, Stein, Baudeloque.

pubis; an operation certainly less dangerous to the parent, than the Cæsarian section, but at the same time, certainly less safe for the child. Or,

Lastly, If none of these means will be permitted, the wretched mother, abandoned by art, to the excruciating and unavailing anguish of labour, will probably expire undelivered. An event, which, however extraordinary it may appear to us, in the improved state of midwifery in this country, happened very lately to the wife of the heir apparent of the greatest empire in the world*.

Deplorable as all these conditions are, we are compelled by necessity, in this case, to make our election of one or other of them. Such are the dispensations of Providence, and to them we must submit.

Which of these operations is best entitled to our preference, when one of

* The Grand Dukes of Russia.

them *must* be performed, I shall now endeavour to determine: with no other view, but the heartiest and best intention to promote the interest of humanity; by shewing, that the fatal Cæsarion operation has in general heretofore, been most unnecessarily performed, and by proving, that it may, almost always in future be prevented: but particularly, by demonstrating the inconveniences and dangers attending it, endeavour to rescue my country-women from a new, precarious, and I think, preposterous operation, which, originating in France, has unhappily extended over all the continent of Europe.

In this calamitous situation, perhaps the most miserable for the unhappy individual, to which she can be exposed in this world so full of evils; we are reduced to submit to that necessity, which every now and then occurs in all affairs of this sublunary world, which supercedes all other considerations, is irresistible in its influence, and which, on this
oc-

casion compels the physician to commit an act the most repugnant to human nature, while it subjects the wretched patient to the extreme of human misery.

In this unhappy dilemma, where the two lives are absolutely incompatible; where one being must be sacrificed to the preservation of the other; where either the mother or the child must be destroyed, or both together be exposed to the extremest danger: to direct our conduct to the safety of the mother, as the first object; and to lessen the painfulness of our own feelings, arising from a necessary call of duty, against which our very nature revolts—I will endeavour to make a fair estimate between the situation of the child in utero, and the unhappy parent; by comparing the value of life to the mother and to the child, and the value of each to society; by comparing the loss they must each sustain by death, and the sufferings each must necessarily incur from the violence inevitably preceding it.

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By this enquiry, I trust, it will evidently appear that the loss of the principle of life to the child in utero, compared with the deprivation of actual life and the attendant misery to the mother, is so incomparably small on the comparison, that it is diminished almost to nothing, and affords the most irrefragable argument in favour of the delivery by the crotchet in preference to either of the other methods.

Whatever reasoning is intended to have this effect, cannot be unacceptable either to the physician or the patient, as tending to reconcile him to the most painful professional duty, and tending to support and console her, in the most afflicting situation of life. For this purpose, I beg leave to submit the following considerations, to the serious attention of my readers.

SECTION

SECTION II.

THAT this life was intended by the Deity as a blessing, and that in general it proves such to the possessor, cannot be denied, without arraigning one of his first attributes, and violating the general sentiment of mankind.

Yet so precarious and unstable are the comforts of this world, that philosophers in all ages, and in all countries, have, from observation expressed their doubt, whether life at any period, may be reasonably expected to prove a future blessing to the possessor; and particularly, one of the wisest, most enlightened, and celebrated characters of antiquity has declared, that no human creature can determine, “ *utrum*
“ *vivere an mori sit melius, dii immortales*

“ sciunt, hominem quidem scire arbitror
“ neminem*.”

If this be a true and correct idea of life, if its enjoyments and miseries are so blended together, that with all the relations and accompanying pleasures, which though not pure, make up the sum of human felicity; it remains to be determined, whether it be better at any time to live, or die; surely the destruction of the living principle before birth, the mere prevention of existence, or the deprivation only of a possibility of life, ought to be considered as a loss inexpressibly trivial.

A being in the uterine state of existence, sustains no immediate loss by the deprivation of the living principle, and can scarcely be said to incur any other positive injury. Before the operation, the child in utero cannot suffer mental anxiety, or apprehension from the threatened violence; nor does it

* Cicero. I. Tuscul. Quæst. de contemnenda morte.

feel,

feel, I am persuaded, the smallest bodily pain in the actual commission even of such violence. Though it be not correctly true, as Shakespeare * says, that

“ The sense of death is most in apprehension :”

and though it be still less true, as he afterwards finely and emphatically expresses himself, in the following description ;

“ The weariest and most loathed worldly life,

“ That age, ach, penury, and imprisonment

“ Can lay on nature, is a *paradise*

“ *To what we fear of death :*”

yet it is certainly from that apprehension, combined with those other circumstances of misery, which usually precede and accompany the act of dying, that death itself can be considered as the greatest of human evils—and from every one of those, the child in utero is entirely exempt.

But we are accustomed in common language, to speak with the same fami-

* Measure for Measure, Act III.

liarity of a living child in utero, as distinguishing it from a dead one, as if children before birth, actually possessed the properties of life, and were susceptible of the same impressions from external violence; insomuch, that it is not easy to persuade ourselves, or by any arguments persuade others, to entertain a contrary opinion. Thus the idea of cruelty to beings in so helpless a situation is highly aggravated, and makes even a deeper impression upon our feelings, than perhaps the same treatment after birth, when the sufferings would be real and extreme. Thus, “ *The Petition of the unborn Babes*” was the quaint title of a popular pamphlet, published some years ago by an ingenious physician, who had taken up most unjust, and therefore most inexcusable prejudices against the art of midwifery; and who endeavoured to fix on it an indelible stain of barbarity, by making the unborn children pathetically complain, of the severity, and cruelty

cruelty of their treatment: by that means the author hoped, compleatly to ruin it in the opinion of the world; as if any motives could possibly urge the practitioners of midwifery, to commit wanton acts of cruelty upon an unborn child!

But as children before birth are incapable of mental apprehension, so it is as undoubtedly true, that they are not yet arrived at, or in possession of bodily sensation, and cannot therefore suffer pain, or become objects of cruelty.

That they cannot suffer from mental apprehension is notorious to general observation. Even years elapse after birth, before the mind is susceptible of fear, or apprehensive of danger. But though it is generally acknowledged, that bodily sensation is very imperfect and obscure before birth, it may require some convincing proof that it does not exist at all in that state, before it will be universally allowed. A strong presumption that such however is the state of

the case, arises from this observation, that although children do often die in utero, yet the mother never can discover by her feelings when death takes place there. The disease of which the child dies, and the act of dying, are equally unknown, and unnoticed by her. The cessation of the accustomed motion, is the first, and for some time, the only difference observable by the mother, between the life and death of the child in utero.

Diseases which at any period, attack the human body possessing sensation, with sufficient force to destroy life, are in general attended with such a degree of pain, as to excite extraordinary motion, and some struggle; at least in articulo mortis. It is highly improbable, that these should take place in the uterus, and the mother be insensible of their effect. It may, however, be barely possible, that the only diseases of which the unborn child is susceptible, are not of the painful kind. Gradual de-

debility, it may perhaps be said, is the only effect of those means, which nature uses, to destroy the principle of life in utero, and such a change would be imperceptible to the mother.

This conjecture therefore, may not be considered as sufficient evidence, however presumable, that the child is not yet arrived at bodily sensation, before birth takes place. But the following observation I think, must be esteemed incontestible evidence of the truth of the assertion.

When we are compelled by dreadful necessity, to open the child's head while we know it is yet living in utero, that operation requires such extreme and painful violence, that, were the child endowed with the slightest sensation, he must of necessity feel it; and his feeling must necessarily be accompanied with such struggles and exertions, as would be emphatically expressive of pain, and must be readily perceived by the mother, in a part so sensible, and irritable as the uterus.

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Upon accurate and repeated enquiry in several such cases, I could never learn, that the mother was sensible of any such alteration in the motion of the child, even at the commencement of the operation, when the violence offered to it first takes place, and must be most painful. We are therefore, I think, warranted in the conclusion, that no sensation whatever does exist at that time; and that no cruelty, or barbarity, can be said to be committed upon a being absolutely without feeling.

Having proved, that the loss which the child sustains by the deprivation of the principle of life, is so extremely small as almost to vanish to nothing, and that its bodily sufferings in the act of deprivation are absolutely none; it becomes proper, next to enquire, what is the value of an unborn child to its parents, and to the community.

Before the birth of the child, parental affection has not taken place,
which,

which, for the wisest and best purposes is one of the strongest, the most universal, and perhaps the most uncontrollable passions of the female breast; often changing, even in the subordinate parts of the creation, the very nature of a timid mother, into that of a ferocious animal. Disappointment of expected pleasure only, not the loss of an object of this powerful passion, or the loss of any actual enjoyment, is the sacrifice, the unhappy parent makes on this occasion.

Had parental affection commenced at the time of conception, or when the embryo is first formed; and had it continued increasing during gestation, as the fœtus advanced in growth; by the time of birth, the passion would have been mature, and its influence most powerful, and the mother's other sufferings would have been greatly aggravated by the loss of a beloved child. But as such a passion could be directed
to

to no useful purpose, during the existence of the child in the uterus, nature, who never performs works of supererogation, either in the physical or moral world, has not yet kindled it in the mother's breast: It begins only with birth; and parents in general may, I think, be literally said to suffer nothing, by the loss of an unborn child.

In the case of wealthy and noble families, this loss is in particular instances acutely felt, but the sensation is not so truly parental as we may suppose. It is not so much the loss of a *child*, which they regret, as the want of an *heir* and *representative*; if sorrow be blended with disappointment, the latter still predominates.

To society likewise, the loss of any individual child, must be exceedingly small, when it is known by daily observation, what great numbers of children are still-born, or die without such violence before birth; when it is likewise

well known, how very precarious is the chance of a child's living two years; but how most of all precarious, is its arrival at that period of life, when it can be of any service to his fellow-creatures, or even participate itself in the enjoyments of the world.

In estimating the value of the life of the unborn child at so low a rate, I *most earnestly* request, that the medical reader will never lose sight, that it is only in comparison with the mother, or when the child's life is put in competition with her safety, that any arguments on this score are entitled to the smallest weight. It is for the preservation of the mother's life only, that we can justify the practice here recommended and insisted on.

But when that object is to be gained, and by dire necessity can be gained by no milder means, it requires only a very short comparative description of the mother's situation, with the preceding account of the child, to demonstrate the preference

ference due to her safety. While the unborn child suffers neither in body or mind, as has been proved above, from the violence which destroys his existence in utero—the unhappy mother's sufferings to spare and preserve that child, must be extreme in both—dreadful even in apprehension to a timid woman, whose imagination is ever active in anticipating evil, but most dreadful in the immediate and actual sufferance, either from the Cæsarian section, or the division of the symphysis; then; after either of these tremendous operations, a train of grievous symptoms follow, which precede death infallibly in one case, and too often in the other. While the loss of the unborn child too, as just described, is extremely small to itself, to its parents, and to the community; the mother, being probably connected by all the dearest relations, as friend and daughter, sister and wife; her death must to society at large be a considerable, and to many individuals
pro-

probably an irreparable loss. With these circumstances in our view, the loss of an unborn child becomes so inconsiderable, as almost to exclude the possibility of comparison.

This comparative estimate of the value of the two lives, and the practice recommended in consequence, receives likewise the strongest confirmation and sanction, from popular opinion and sentiment; which in this case ought to direct our conduct, because from them there lies no appeal. It is the interests of mankind at large we are solicitous to promote; it is their feelings alone we are anxious to gratify. Instead therefore of those opprobrious epithets applied by ignorant or interested persons to this practice, infinite credit, in my opinion, is due to the practitioners of midwifery, for their fortitude in this trying situation; a situation, which of all others, requires the firmest resolution to act; for the action we are by
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necessity compelled to do, is in direct violation of all our finest feelings ; and in my opinion, no worldly reward can compensate for the pain we suffer, and the sacrifice we make, by this unhappy, but indispensable call of duty.

SECTION

SECTION III.

I HAVE been induced in the preceding section, to dwell the longer on this part of my subject, because, though I am aware that the practice insisted on, is common in this country, yet it has always been avowed with reluctance, and performed with hesitation; and therefore, I am convinced, it has been in many instances most unmeaningly, and what is infinitely worse, most injuriously delayed.

The ancient authors describe it as only to take place when the child is already dead in utero; and all the latest foreign writers concur with the ancients, and to intimidate the practitioner, brand it with the most opprobrious, and even criminal epithets*, and recommend in
pre-

* See Crantz, Weidmann, &c. &c. one calling it Homicidium; another, Facinus nefandum, &c. But a late writer in our own country has ventured a step

preference, during the life of the child, every other method however dangerous to the mother. Even in the present practice of this country, to soothe our feelings, we always wish to persuade ourselves that the child is actually dead, before we attempt to lessen the head, and deliver with the crotchet. This conduct is founded on a strong natural sentiment, and is in the first effect, innocent, and therefore excusable; but in hope and expectation, that the child *may* die before it is absolutely necessary to perform this operation, we are often induced, I am afraid, to wait much longer than is consistent with the mother's safety; and then, shockingly to humanity, and disgracefully to the profession, both parent and child, are involved in one common death.

I have been much misinformed, if upon this ground, and to gratify the scrupulous feelings, or mistaken prin-

further; I trust however, without being aware of the force of the English word, for speaking on this subject, he says, "by the horrid, (and 'tis to be feared, sometimes *murderous*) expedient," &c.

See Aitkin's Elements of Surgery, p. 389.
ciples,

ciples, of otherwise able, and worthy men, many valuable women have not lost their lives in this country, and even in this city.

Professional duty ought to be superior to all our feelings, whenever they interfere with each other. Necessity, (nay, even honesty!) in this case, will not admit the practitioner to indulge himself in those feelings most grateful, because most flattering to the human heart; they must be sacrificed to his duty, or he is most unfit for his profession: and whatever his general knowledge and skill may be, his practice in this case, will often be fatal to his patient, and of course highly injurious to society.

I am convinced, that this is not the only part of the common practice of midwifery, in this country, where we have been long and much to blame, by delaying the operative delivery, whether manual, or instrumental, when needful, too late. An opinion has been taught, from great authority,

which has of late pretty universally prevailed throughout this country, that nature is all-powerful in parturition; that there is no putting limits to, or circumscribing her abilities; and that the interference of art, while those abilities are in vigour, is in all cases injudicious, and dangerous.

This opinion, has probably in part arisen, from that mistaken analogy in parturition, the influence of which I have endeavoured to obviate in the introduction to this essay; partly from natural timidity of disposition, from indecision, and from indolence or reluctance of action; but chiefly I believe, from early and deep impressions of the mischievous effects of rashness, without sufficiently adverting to the dangerous consequences of procrastination. Wherever, or however this opinion may have originated, it has been extended, as observed above, to a most blamable degree; for though as a general position, it is incontrovertibly true, yet it has
so

so many exceptions, and is in so many instances false in fact, and fatal in consequence, by preventing in critical situations, the timely recourse to art, that its influence ought to be corrected, or restrained, and its application to practice very cautiously adopted.

I hope it may be permitted in illustration, to make a further digression, and request the attention of my readers to the following obvious circumstance: No position in practical midwifery is more universally true, than that the powers of nature, are equal to the expulsion of the placenta, and that in common it may, with perfect safety, be trusted to the operation of those powers; yet the extension of that position to general practice has, in innumerable instances, produced the most dangerous, and in several recent cases, the most fatal consequences. And here I will venture to appeal for confirmation; both of the effects of the general doctrine, and of the particular illustration, to many of

the most respectable and experienced practitioners in this city.

In that precise degree of laborious parturition, which is the subject of this dissertation ; to check, or prevent the dangerous operation of an opinion or principles, so conformable to our observation of the admirable wisdom of nature, in all her other works ; and so agreeable to our own inclination, and which are therefore so apt to impose upon our judgement ; I will beg leave to revert to the consideration of the first practical position in this essay, viz. “ the inevitable necessity of lessening the volume of the child’s head, in certain dimensions of the pelvis*, with a view to induce and urge an early commencement of the operation ;” for upon the timely performance of the first stage of this business, in a great degree, depend the facility, safety, and efficacy of the subsequent delivery ; the

* See page 26.

delaying the commencement too long, is therefore in fact to deprive it of all future benefit, or at least to render that success precarious, which might otherwise have been infallible.

When once the necessity of this practice is established, by the acknowledged dimensions of the pelvis, as precisely ascertained in a former part of this essay†; then, in all the different degrees of deformity absolutely requiring the child's head to be lessened, great inconveniences, without a possibility of benefit, may happen from procrastination, while infinite advantages will ensue from the early commencement of the operation.

Thus for example, if the pelvis measures two inches and upwards, to less than three inches, from pubis to sacrum, and the head be opened in the beginning of labour, and the cerebrum discharged; by the collapſion of the

† See page 30.

bones, the volume of the head will be so much reduced, as in all probability to admit in time, of being forced into the pelvis by the powers of nature; by which means the application of the crotchet may perhaps, be altogether avoided; at least, the danger attending the use of that instrument, while the head lies remotely above the brim, will certainly be prevented. A circumstance, of great consequence towards infallibly insuring the perfect safety of the patient in this operation. But if the pelvis is so contracted, as only to measure from one inch and a half, to rather more than two inches; there can be no reasonable expectation, or even possibility, that the head of a child at full maturity should, by the pains of labour, be forced into the pelvis without the assistance of the crotchet: notwithstanding which, great advantages will be gained by the early opening of the head, for putrefaction will be sooner, and more complete, the child's body of course will become softer

ter and more compressible, the union of the bones will be much loosened, and the subsequent extraction will be infinitely easier to the operator, and proportionably safer for the patient. Thus in all possible cases, and in all points of view, the commencement of the operation cannot be undertaken too early, wherever the cavity of the pelvis is within the stipulated dimensions, and the necessity of the operation is completely established by deliberate enquiry, and if possible, confirmed by consultation.

Having, I presume, satisfactorily proved the necessity and propriety of opening the head of the child, at the beginning of labour, whenever the capacity of the pelvis is only two inches and three quarters, or certainly less than three inches, from the utter impossibility of a child of ordinary size at full time, being born alive by any means, either of nature or art, through so small a pelvis.

It

It will here naturally occur to the inquisitive reader, to inquire, whether it is not often necessary to open the head of the child, when the dimensions of the pelvis are considerably larger than those stated above, as invariably requiring this operation? To which I beg leave to answer, that it certainly is; but it does not come within the intention of this essay, to consider at large any other than those dimensions, which absolutely, and of themselves demand this, or one or other of the specified operations. The necessity of the case depends here, upon the extraordinary size of the child; and I will only just observe, that as it is impossible to determine the absolute volume of any head, while it remains in the uterus, so we can only be directed in our conduct, by the inability of the powers of nature to force the head into the pelvis; and we ought on no account therefore, to have recourse to this dreadful operation, till those powers are exhausted, or the mother's
life

life seems to be threatened with danger from further delay. No precise rule can be prescribed in this case; it must be trusted to the sagacity, the discretion, and the good sense of the operator, and the assistance of a consultation, which in this situation, ought never to be dispensed with. The event in this case, however, may always be reasonably expected to prove favorable to the mother, unless the labour has been protracted much beyond the limits prescribed by general practice; because, in a pelvis of such dimensions, the delivery, when once determined, can always be easily, speedily, and of course safely accomplished.

Having, I trust, in the second section, by the comparative estimate of the value of the two lives, placed in competition, satisfied the most scrupulous, of the propriety, of never exposing the valuable life of a mother to absolute destruction by the Cæsarian operation, for the certain safety of the child; or to imminent danger by the division of the symphysis, for a mere chance
of

of preserving the child. Having, I hope, equally satisfied the most diffident and timid, of the impropriety of that unmeaning delay which, while it unnecessarily exposes the unhappy woman to excruciating torture at present, equally enhances her future danger without a possibility of benefit; the other question which I proposed to examine and endeavour to determine, and which still remains to be considered, is, what are the smallest possible dimensions of the pelvis, through which a child with its head opened, can certainly be extracted with safety to the mother, by means of the crotchet?

As no author has described the former question with sufficient accuracy and decision, infallibly to direct us in first opening the head, so I know of none, who has even attempted upon sure principles to ascertain the latter.

I will therefore now endeavour in a few words to determine it, with every degree of exactness necessary or useful

to

to direct our conduct in future ; a point in practice, that may be as essentially necessary to be settled, previous to the commencement of the operation, as even the determination of the first dimensions requiring the use of the crotchet ; for otherwise, the head may be unnecessarily opened, and the child's life wantonly destroyed, without ensuring safety to the mother ; for we may not be able to extract the child through the natural passage, even after the head has been lessened. In which case, we shall be ultimately compelled to have recourse to the section of the symphysis pubis, or the Cæsarian operation, without the possibility of any equivalent.

SECTION

SECTION IV.

IT is well known to the experienced reader, and will be confirmed by Elizabeth Sherwood's case, to be related by and by, that after the head of the child is once opened, all the bones, except those making up what is called the basis of the cranium, may easily be broken or destroyed with the crotchet, and extracted, bit by bit, with a pair of small forceps. The whole of the parietal and frontal bones may be thus readily and easily removed: but the basis of the cranium, in that case, absolutely resisted all the force I was possessed of, or dared to employ. I could not break it, and extract it piecemeal, as I had done the other bones; and I was fearful of being foiled in the completion of the
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the delivery, till I thought of changing the position of the head, by turning it sideways, for by that means the volume was very considerably diminished: but though it was then comparatively easy, it still required considerable exertions to bring it in that situation through the upper aperture or most contracted part of the pelvis.

From the event of this case, I concluded, that whatever pelvis would admit the basis of a foetal cranium turned sideways, to enter and pass through, would be always sufficiently capacious to admit of this mode of delivery, and preclude the Cæsarian operation. To determine this point; the first thing needful was, to ascertain the width of the basis of the foetal cranium, when all the upper part of the head is removed. I therefore examined a great number of children's heads, who died immediately in, or near the time of birth, and found but the smallest possible variety in the volume of the bones making up the basis

sis of the cranium, when it is turned sideways; for measuring these bones in that state, I found that they never exceeded one inch and a half in width; indeed, they seldom measured quite so much, after the frontal and parietal bones are removed. Whenever there is a space from pubis to sacrum, or from the fore to the hind part of the upper aperture of the pelvis, equal to an inch and half, I am convinced it will be always practicable to extract a child by a crotchet, after the head has been some time opened, and the texture of the child's body is softened by putrefaction, (as recommended above), and the whole of the parietal and frontal bones are picked away; and that,—with tolerable facility to the operator, and perfect safety to the patient.

The manner of performing the operation is so easy, and in general so well understood, that I do not think it necessary to enter into any formal description of the manner of doing it, or
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give a tedious and minute detail of what may be found in every system of midwifery, from la Motte, who first describes and recommends it, to Smellie, and all the later authors; and to do which with safety, every person is instructed in his earliest studies. But it is especially less necessary in this essay, because in the case annexed, I shall be as minutely attentive in describing every important circumstance, which related to the ultimate delivery, as I purpose in the first part to be in ascertaining the dimensions of the pelvis, previous to the commencement of the operation. That the case altogether, may afford (as far as any single case can) a demonstration of the possibility of bringing a child at full time, and of the ordinary size, through a much smaller pelvis, than has been usually supposed by practitioners, or described by authors, as admitting such a mode of delivery; and likewise, that it is practicable with perfect safety to the mother,

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by ordinary skill, and ordinary attention.

Thus, the Cæfarian operation may with certainty be avoided, in all dimensions greater than those above described; or in other words, it is never absolutely necessary where the small diameter from pubis to sacrum, measures completely one inch and a half. Or (which is not unusual) where there is a space equal to that width on either side the projecting sacrum. Dimensions much smaller than where that operation has been most generally performed, and infinitely smaller than where it is invariably required by all the best writers on this subject*.

I cannot conclude without enforcing in the strongest terms the necessity of opening the head of the child in the very beginning of labour, thereby to induce as speedy, and compleat a state of putrefaction as is possible, for by that means

* See Levret, Simon, Stein, Roederer, Saxtorph, Baudeloque, Crantz, Weidmann, &c.

(let me entreat permission to repeat it again,) the union of the child's bones will be loosened, and the whole body reduced to a more compressible state, affording less resistance, and requiring less violence, and of course exposing the mother to less danger of injury. I am persuaded, not only the safety, but even the practicability of extraction, will in a very small pelvis, depend on an attention to this circumstance.

That the young practitioner may be directed in all circumstances, which admit and require precision, I would recommend the delaying all attempts to extract the child, till the head has been opened, at least thirty hours. A period of time sufficient to compleat the putrefaction of the child's body, and yet not sufficient to produce any danger to the mother; at least the beneficial effects, of facilitating the extraction of the child, I am firmly convinced by frequent experience, will much over ballance any possible injury, which may reasonably be expected,

pected, from the putrid state of the child, and secundines, in so short a time.

The propriety however of this delay, entirely depends upon the head's being opened, in the beginning of labour; for if we do not perform the first part of this operation, till the labour has been protracted so long, as that the woman's strength begins to fail, we must expedite the delivery as speedily as possible, otherwise the danger we wish to avoid, will infallibly be incurred—No woman can suffer continued labour beyond a certain period, without fever, inflammation, and the most imminent danger, if not death ensuing.

In the use of the crotchet, I must beg leave to recommend the introduction of that instrument into the cavity of the cranium, and the fixing it upon some part of the solid bones, which compose the basis; by which means a firmer purchase will be procured, it will be less likely to slip, and if it should slip, there will be less probability of its injuring the soft parts.

parts. This internal application of the instrument, is obviously so much safer on all accounts, that I should not have thought it demanded notice, had not the last author, who has written on the subject of midwifery in this country, expressly recommended the crotchet, to be applied “some where on the out-
“ side of the cranium*.”

I must likewise beg leave earnestly to recommend, as it may eventually be of great importance, to keep one hand constantly in the vagina, while the extraction with the crotchet is performing, for by that means we shall always be more cautious in the quantum, and direction of the force necessary to be employed; and what is most particularly to be guarded against, we shall by that means, certainly prevent any injury to the rectum, from the point of the crotchet, if it should by any means, unfortunately slip its hold.

* See Hamilton's elements of the practice of midwifery, p. 192.

For although the hand which is between the rectum and the instrument, may in that case be hurt, yet it must infallibly defend the rectum from being wounded; an accident which might otherwise easily happen, and which is an object of infinite consequence to be prevented; for the future comfort of the unhappy patient, will much depend upon such prevention; too great care or caution, cannot therefore be exerted to guard against such an accident, and the means recommended is obviously infallible.

This is a circumstance, which has not escaped the acute Celsus, in his description of this operation, who expressly mentions it, though not only, or precisely with the same intention, “ Trahere
 “ autem dextra manus uncum, *sinistra*
 “ *intus posita,*” &c. and which he supposes the more necessary, when the body being putrid, the instrument may be apt to slip—“ Nam uncus injectus pu-
 “ tri corpusculo facile elabitur, in quo
 “ quid

“ quid periculi fit, supra positum,” which danger he had before stated in the following manner, “ unci acumen
 “ in ipsum os vulvæ delabitur, sequi-
 “ turque nervorum distentio, & ingens
 “ periculum mortis;” and to avoid the danger which may ensue from this accident, he recommends the operation to be done slowly, and with intervals,
 “ leneter trahere oportet; & per has
 “ occasiones paulatim eum educere.”

He begins the chapter upon this subject, with saying that it is among “ the most
 “ difficult, and dangerous operations, and
 “ that it requires *consummate skill*, and
 “ *the utmost caution* in the performance:”

The whole chapter may be considered as a commentary on that position, and which I will beg leave again, earnestly to recommend to the attentive perusal of my young readers, as I have already once done at the end of the introduction. For although near two thousand years have

elapsed since Celsus lived at Rome, there is not perhaps, a better dissertation extant, upon this subject, either in point of composition, or matter. He concludes it, by recommending such treatment, as conveys a strong impression of the danger of the case, according to his opinion, and the necessity of great attention in the subsequent management of the patient; and which, is one among innumerable instances of the accurate observation of the antients, in the description, and comparison of the different morbid states of body, produced by different causes. “ Reliqua
 “ curatio talis esse debet qualis in in-
 “ flammationibus, & in his vulneribus,
 “ quæ in nervosis locis sunt, adhi-
 “ betur*.”

I will beg leave now to present the case, repeatedly mentioned in the preceding essay, in confirmation of the possibility of the doctrine insisted on.

* Cels. lib. 7. cap. 29.

SECTION V.

CASE.

ELIZABETH SHERWOOD, the subject of the following case, was from early infancy, by her mother's information, of an infirm weakly constitution, and of a ricketty habit; which continuing for many years, she was so much stunted in her growth, as never to measure more than forty-two inches in height. She was at the same time so extremely deformed, both in her spine and lower extremities, as never to be able to stand erect for one minute, without the assistance of a crutch under each arm. At the age of twenty-seven years, she, however, became with child, and

and was admitted a patient into the Store Street Hospital.

Early on Sunday morning, November the 19th, 1776, she came into the house, complained of having been in pain the two preceding days, and nights, so as to have had very little sleep. I examined her per vaginam that evening, with great attention, and as her pelvis was singularly distorted, and the capacity very much contracted, it will be right to describe the result of that examination, with every possible degree of accuracy.

Immediately upon the introduction of the finger, I perceived a tumour equal in size, and not very unlike in the feel to a child's head. However it was instantly discovered, that this tumour was formed by the basis of the os sacrum, and last lumbar vertebra, which projecting into the cavity of the pelvis, at the brim, barely left room for one finger to pass between it, and the symphysis pubis; so that the space from bone to
bone,

bone, at that part, could not exceed three quarters of an inch. On the left side of the projection, quite to the illeum, which was about two inches and a half in length, the space was certainly not wider, by some of the gentlemen, who examined her afterwards, it was thought to be rather narrower. On the right side, the aperture was rather more than two inches in length, from the protuberance to the illeum, and as it admitted the points of three fingers (lapping over each other) in the widest part, it might at the utmost be about one inch and three quarters, from the hind to the fore part; but it became gradually narrower, both towards the illeum, and towards the projection.

The os uteri although but little dilated, was soft, and flabby, as it usually is on the approach, or in the beginning of labour. The membranes were not yet broke, but with some difficulty I perceived the child's head through them, situated

situated very high above the projection. The tumour of the uterus extended to the scrobiculus cordis, and was of the usual size at the complete term of utero gestation. The abdomen was hard and tender. As she seemed much fatigued for want of rest, fifteen drops of tinct. thebaica was given to her, by which some sleep was procured between the pains. I was informed that the membranes broke some time after I left her, and that there seemed to be the usual quantity of liquor amnii. The next morning being hot and thirsty, and her pulse very quick, I directed ten ounces of blood to be taken from her arm, and the bandage accidentally slipping off, soon after her arm was tied up, she might perhaps lose as much more, before it was discovered. No alteration whatever had taken place, either in the state of the os uteri, or the position of the child's head.

In so extraordinary and singular a case, I naturally wished (on my own account)

account) for the advice and assistance of my professional friends ; while at the same time, I knew it would give them much satisfaction to have an opportunity of examining so distorted a pelvis, and of seeing the event of so singular a case. Accordingly I met in consultation that evening, Drs. Bromfield, Denman, Walker, and Mr. Watson ; Dr. Hunter's presence was requested, but he was engaged. Every gentleman present immediately satisfied himself, by examination per vaginam, of the dimensions of the pelvis, concerning which there was the smallest possible difference of opinion ; some thinking it rather narrower, but none wider than the dimensions stated above. We weighed with great deliberation, as became us, every circumstance by which our future conduct in this case, ought to be regulated ; particularly, we used our best endeavours to determine the state of the child in utero, and whether, if the Cæsarian operation should be performed, which
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we had in contemplation to do for some time, there would be a certainty of preserving one life at least. We were rather disposed to believe that the child was dead. It was therefore agreed, that an attempt at least, ought to be made to deliver the poor creature, by opening the child's head, and extracting it with the crotchet.

It was my duty to perform the operation, which I began about eleven o'clock that night, after placing her in the usual manner, close to the edge of the bed on her left side, as the situation most commodious both for the patient and myself. Even the first part of the operation, which in general is sufficiently easy, was attended with considerable difficulty, and some danger. The os uteri was but little dilated, and was awkwardly situated in the center, and most contracted part of the brim of the pelvis. The child's head lay loose above the brim, and scarce within reach of the finger, nor was there any
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future directly opposite to the os uteri. Having desired an assistant to compress the abdomen with sufficient force, to keep the head in contact with the brim of the pelvis, so as to prevent its receding from the scissars, upon the necessary pressure of the point to make the perforation; I introduced them with the utmost caution, through the os uteri, and after repeated trials, at length succeeded in fixing the point into the sagittal future, near the posterior fontanelle. I very soon and with great facility, penetrated into the cavity of the head; destroyed the texture of the cerebrum; with a common spoon extracted a considerable quantity, and breaking down the parietal bones, made an opening sufficient for the free discharge of what remained.

In this state we left her; and although she was fatigued with this part of the operation, no opiate was given, as I wished to have the full effect of the labour pains; hoping, that after the
brain

brain was discharged, the bones would collapse, and that a portion of them at least might be forced into the pelvis. In this expectation however I was disappointed; for notwithstanding she was prevented from sleeping all night, by the frequency and violence of the pains; in the morning I was not sensible of the smallest alteration in the position of the child's head. During the whole day, the pains were neither so strong, or so frequent as they had been; her pulse was extremely quick, but tolerably strong; the discharge from the vagina was very considerable in quantity, and most abominably fœtid. Drs. Bromfield, Denman, and Hunter saw her in the course of the day; she was examined besides, by more than thirty students in midwifery, who were at that time attending Dr. Denman's and my lectures, and which she willingly permitted at my request, from a representation of the singularity of her case, and
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the utility which might result from its being more generally known.

Towards the evening the pains again considerably increased, and as I wished to benefit from the full effect of them, no opiate was given, she therefore had no sleep; and the pains continuing through the whole night, when I first saw her the following morning, her strength was greatly reduced; her pulse beat 140 strokes in the minute, notwithstanding every precaution had been used to guard against fever, particularly, by forbidding all strong liquors, and by keeping the ward unusually cool. Her spirits however were good, and her resolution unabated; for although she was extremely anxious to be delivered, and expressed her willingness to undergo any operation however painful for that purpose, she was equally ready to submit to my determination if any longer delay was required. Upon examination, a small portion of the head was found squeezed into the pelvis;

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indeed there were some little detached bits of the parietal bones lying loose in the vagina.

Our intention, by delaying the extraction of the child six and thirty hours after opening the head, was in the first instance, to allow the uterus opportunity, by its continued contractions, to force the head as low, and as much within reach of the crotchet, as the nature of the case admitted; and afterwards, to induce as great a degree of putrefaction as possible in the child's body, by which means it would become soft and compressible, and afford the least possible resistance in its extraction. These two purposes appeared to me now completely accomplished, and that no further advantage was to be expected from further delay. On the contrary, I was fearful the permitting so large a mass of putrid matter as a child at full time with placenta, &c. to remain in the uterus longer than was absolutely necessary, might expose her to the future

ture danger of a putrid fever, if she should escape all material injury from the inevitable violence, and consequent danger of the operation.

I immediately determined to begin to make an attempt to extract the child; I call it an attempt, for I was far from being satisfied in my own mind of the practicability. Adverting to the very small space of only one inch and three quarters at the utmost, and in the widest part, and that only on one side the projecting sacrum, while the space between it and the symphysis, and on the other side, barely amounted to three quarters of an inch, I trust I am justified in my feelings and expression. Having placed the patient as usual on her left side, near the edge of the bed, as the most commodious situation, Mr. Shute of Exeter, who then resided in the hospital as house pupil, and another student being present as assistants; about ten o'clock on Wednesday morning, I began the operation; Dr. Bromfield was so obliging as to call on me, soon after-

wards; but his engagements permitted him to stay only a few minutes.

The os uteri being situated as before described, in the most contracted part of the brim of the pelvis, where the space was incapable of permitting the introduction of the curved point of the crotchet, without great difficulty and danger. My first endeavours were bent to draw the os uteri with my finger, into the widest part of the brim of the pelvis, and to dilate it as much as possible. Both the removal of the os uteri, and such dilatation of it as the bones admitted, were effected without much trouble. I then introduced the crotchet through the perforation, into the head, and by repeated efforts made in the slowest and most cautious manner, destroyed almost the whole of the parietal and frontal bones, or the whole upper and presenting part of the head; and as the bones became loose and detached, they were extracted with a pair of small forceps, to prevent as much as possible, the laceration.

ceration of the vagina, in their passage through it.

The great bulk of the head, formed by the basis of the skull, still however remained above the brim of the pelvis, and from the manner in which it lay, it was impossible to enter, without either diminishing the volume, or changing the position; the former was the most obvious method, for it was a continuation of the same process, and I trusted would be equally easy, in the execution; I was however most egregiously mistaken and disappointed, being repeatedly foiled in every endeavour to break the solid bones which form the basis of the cranium; the instrument at first invariably slipping, as often, and as soon as it was fixed, or at least, before I could exert sufficient force to break the bone. At last however by changing the position of the instrument, and applying the convex side to the pubis, I fixed the point I believe, into the great foramen, and by that

means became master of the most powerful purchase that the nature of the case admitted; of this I availed myself to the utmost extent, slowly, gradually, but steadily increasing my force, till it arrived to that degree of violence, which nothing could justify but the extreme necessity of the case, and the absolute inability in repeated trials, of succeeding by gentler means. But even this force was to no purpose; for I could not perceive, that I had made any impression on that solid bone, or that it had been the least advanced by all my exertions.

I became fearful of renewing the same force in the same way, and therefore abandoned altogether the first idea of breaking the basis of the cranium, and determined to try the second, by endeavouring to change the position. I once more examined, with a view to ascertain as accurately as the mangled state of the head would admit, how it presented, and what proportion in that state it should seem

seem to bear to the aperture through which it was to pass; from the information thus procured, I must acknowledge, the second method appeared to me but a forlorn Hope, however there was no other resource. I therefore again introduced the crotchet in the same manner, and fixing it in the great foramen, got possession of my former purchase, then introducing the two fore-fingers of my left hand, I endeavoured with them to raise one side of the fore-part of the head and turn it a little edge-ways; immediately and easily succeeding in this attempt, the two great objects were at once accomplished: for the position was changed, and the volume diminished. Continuing my exertions with the crotchet, I soon perceived the head to advance, and examining again, found a considerable portion of it had been brought into the pelvis.

Every difficulty was now removed, and by a perseverance in the same means for a short time, the remaining part of the

head was brought down and out of the os externum.

After waiting a few minutes a napkin was put round the neck of the child, and given to an assistant. I then introduced the crotchet, and (first opening the thorax) fixed it firmly in the sternum; by our united force strongly exerted for about a quarter of an hour, first one shoulder was brought down and then the other; and lastly after opening the abdomen, the whole body (with the sternum and spine pressed close together) was extracted in the most putrid and almost dissolved state, but it appeared to be a moderately sized child at full time. The bones of the head were preserved. The placenta came away without much trouble. The operation continued for about three hours, and the poor creature altho' she had been in strong labour three days, and her bodily strength was much exhausted by the violent and unavailing pains, yet she supported the whole business with surprizing fortitude, and suffered

ferred much less than might reasonably have been expected, either from the length of the labour, or the extreme violence in the delivery. She went to sleep very soon after the operation was finished, passed a good night, voided her urine freely, complained of very little pain, had only the usual fever, and recovered so fast that she sat up the seventh day, acknowledging with great gratitude, that she was then as well in all respects, as in any former period of her life.

As far as I have been able to procure information either from books, or the oldest and most experienced practitioners of this city, this woman's pelvis was the smallest through which a child at full time and of the ordinary size, however lessened by art, has ever been extracted; and as it was in contemplation in this very case to perform the Cæsarian operation, if we could have been satisfied of the life of the child; upon the presumption of the impossibility of bringing it under
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the circumstances of age and size above described through the natural passages, I hope the event of this case may prove the means of frequently preventing that fatal operation in future.

Before I conclude, truth and candour require me to acknowledge, that notwithstanding I have stated this woman's pelvis to be the smallest, where such delivery has ever been successfully performed; yet I can lay claim to no merit whatever on the occasion, the operation was undertaken contrary to my opinion, succeeded very contrary to my expectation, and yet in the performance, it neither required extraordinary skill or extraordinary attention, I can therefore only be entitled to the negative praise of having done no material injury to my patient, by the extreme and unavoidable violence of the operation.

CHAPTER

CHAPTER II.

SECTION I.

ON THE DIVISION OF THE SYMPHYSIS
PUBIS.

HOWEVER successful the Cæsarian operation, if early performed, must be to the child, and however successful in one or two modern instances on the Continent, it may have proved to the mother, the immediate cruelty of the performance, and the little probability of safety to the unhappy patient, have rendered its prevention a great desideratum in practical midwifery.

Under such desperate circumstances, as have been usually supposed to require
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the Cæfarian operation, whatever invention may have a tendency to diminish the danger to the mother, while it has the prefervation of the child, for its immediate and indifpenfable object, demands a candid examination from the practitioner of midwifery, and has a fair claim to the gratitude of the public.

The fection or divifion of the fymphyfis pubis, has been lately invented and performed at Paris, for that purpofe with fome ingenuity and much humanity, by Monf. Sigault, a phyfician practifing midwifery in that city. It was intended by the inventor, infallibly to fupersede the Cæfarian operation; how far that was a reasonable expectation even upon theory, and how far it may be entitled to any praife from experience, are to be the objects of the following enquiry.—It is not perhaps very eafy to explain by what fatality it has happened; but there is certainly no account of the invention of any remedy in the records of medicine, or any new ope-

operation in the practice of surgery, which has been attended at its outset with such extraordinary circumstances, or has been ushered into the world with such singular eclat.

The division of the symphysis pubis, was not offered to the consideration of the practitioners of midwifery, in the usual way of an hint or experiment, to be confirmed or rejected as future experience might warrant; but upon the very first performance, it was immediately, and most enthusiastically adopted, by a numerous body of learned men, and competent judges, the *Faculté de Médecine de Paris*, or *College of Physicians* in that city, who by their conduct on this occasion seem to have thought, that it was impossible to be too prodigal of their praise, or too profuse in their rewards; for upon the report of their committee, of the accomplishment of the cure of the first patient, they framed a resolution, not merely expressive of their approbation, but conveying the most extra-

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travagant compliments to Mons. Sigault*, by concluding it with an order for a *medal*

* “ Primo tentamini interfuerit Ordo Saluberrimus ;
 “ mox quibus honoribus tam egregiè ausos prospero
 “ beatos successu, ipse, plaudentibus omnium ordi-
 “ num civibus, *auxerit, ornaverit, cumulaverit.*”

Roussel. lib. citat. p. 111.

The whole resolution is too curious to be omitted.

“ Collegæ clarissimo M. Sigault, operationis illius
 “ inventori, defensori, auctori, eò majora deberi pro-
 “ fessa est saluberrima facultas, quo majus arti medicæ
 “ dedit incrementum, quo præstantiora fecit ingenio,
 “ manu, & opibus erogatis : justum in sua non esse po-
 “ testate præmium *Civium Conservatori* ; in honore
 “ semper apud se futurum eximium illum Collegam,
 “ & omnibus presentibus ac posteris commendandum
 “ laudandumque voluit. Quæ propter jussit in calculi
 “ argentei aversâ facie incidendam esse hanc inscrip-
 “ tionem.

“ *Anno 1768 Sectionem Symphyseos ossium pubis invenit,*
 “ *proposuit: Anno 1777 fecit feliciter M. Sigault, D. M. P.*
 “ *Ipsique centum calculos illos esse offerendos.*

“ Cum vero, predicante M. Sigault constet Collegam
 “ alium, M. Alphonsum le Roy, suis experimentis,
 “ suis laboribus, adhortationibus, operationis facien-
 “ dæ, absolvendi partûs & vulneris sanandi partem
 “ haud ingloriam fuisse, jussit Ordo Saluberrimus, ad
 “ finem inscriptionis hæc addenda esse verba.

“ *Juvit M. Alphonfus Le Roy, D. M. P.*

“ Cui quinquaginta offerentur calculi illi argentei.”
 Vid. Res Gestæ. p. 10, 11, & seq.

to be struck upon the occasion ; describing the time, place, and person, when and by whom this invention was contrived and executed, and upon whom, as the preserver of his fellow citizens, they expressly say, it is not in their power to bestow a reward adequate to his merit. By these means was this great momentous event to be announced to the present generation, and afterwards be handed down to the remotest posterity. Last of all, that substantial reward might accompany empty praise, a royal pension was procured for Monf. Sigault*. These circumstances bestow'd a lustre and an importance on the operation, to which, by its own intrinsic merit, it was by no means entitled, and without which, in all probability, it would very soon have dwindled into deserved obscurity.

* Tout le monde sait que la Faculté de Médecine de Paris, a fait frapper une médaille à M. Sigault, & que celui-ci a obtenu *une pension du gouvernement*. Baudelouque l'art des Accouchemens, vol. II. p. 236.

One cannot however be surprized, that circumstances like these should induce most favorable prepossessions in the opinion of the inhabitants and practitioners of any country, wherever they might happen; much less can one wonder at their effect in France, where in all affairs of life, it is well known to form a prevailing part of the national character, to be much under the influence of the imagination. The new operation was therefore immediately adopted, as a great improvement throughout that kingdom; but the splendor with which it made its first appearance was not confined to France, it soon extended over other parts of the continent; first dazzling the fancy, and then seducing the judgment, even of our cautious and learned neighbours, both in Holland and Germany. The celebrated professor Camper of Groningen, a name pre-eminent in the learned world, having early indulg'd the most sanguine hopes of its success, upon theory, while in Germany, the
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operation itself was actually performed by the President Siebold of the university of Wurtzburg, and Professor Guerard of the university of Dusseldorf.

Though we can scarcely be surprized, at the speedy and general adoption of this new operation throughout Europe, from the circumstances attending its introduction; it is impossible to mention without censure, the unphilosophical precipitation of the college of physicians at Paris on this occasion, to which alone the frequent repetition of the practice is to be attributed; and for the consequences of which, they alone are responsible. If a single successful case in any branch of medicine, however extraordinary, were to entitle a man to the splendid rewards granted to Mons. Sigault, but especially to a *medal*, every practitioner might reasonably expect to have his name handed down to posterity!

Such are the powers of nature, so active and vigorous in certain constitu-
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tions is the *Vis medicatrix*, or that principle in animal bodies, which restores the machine when put out of order by accident or disease; and especially that ability to resist the fatal effects of violence, in whatever manner offered to the body, that there is scarce a situation to which it can be reduced, however alarming, where instances of most unexpected recovery have not happen'd. No discreet or sober minded man, however personally interested in the event, is therefore very sanguine in his expectation, from the successful issue of a single case, be the cure ever so compleat. If the credit and interest of an individual, which must be reasonably supposed, and even allowed, somewhat to bias his judgment, would not justify him in the hasty adoption, and unqualified recommendation of any method on such ground; how is it possible on this occasion, to reconcile with ordinary prudence and discretion, the conduct of the college of physicians at Paris? Instead of that severe

vere and critical examination, becoming grave and learned men, previous to the adoption of any novelty; they first, with great parade, promulgate to the world, and then sanctify by their authority, on the slight evidence of a "hair breadth 'scape," an innovation on the established practice, painful and hazardous to a great degree in the very performance, precarious in its beneficial effects, and most dangerous in its future consequences; an innovation, which does not appear to have been required by necessity, but which nothing less than the last necessity could justify or excuse. If candour requires of *us*, that we give them credit for the best intention in rewarding present merit, to stimulate to future exertions of industry and ingenuity, for the benefit of society; at least, their peculiar station and duty required of *them*; to be extremely circumspect in the disposal of such rewards; otherwise, instead of promoting the interest of humanity, they would only

thereby, urge and encourage ignorant, adventurous, or enterprising men, to rash and dangerous undertakings; the prevention of which was one principal object, that all governments have had in contemplation, by the institution of medical colleges, or corporations.

Very much to the credit of the practitioners of this country, and a strong proof of that sound sense and sobriety of judgement, which in all affairs of life characterize Britons; this new-fangled operation, notwithstanding the alluring representation of its partisans, and which the President Seibold declares * with regret, first seduced him; as far as I have been able to learn, has never once been performed in this kingdom. I believe we are much indebted for its prevention likewise, to the early interference of a Gentleman of great expe-

* “ Je regrettai vivement, comme je m’en repens
 “ peut-etre encore de m’etre laissé seduire *aux Appas*
 “ de l’operation nouvelle.” See a Letter from Mr.
 Seibold to the Royal Academy, quoted by Baude-
 loque, d’Art des Accouch. vol. II. p. 251.

rience,

rience, abilities, and reputation, whose superiority in anatomical and obstetrical science, is universally acknowledged all over Europe, but whose opinion is deservedly resorted to, as the highest authority in this country. The women of Great Britain are therefore under considerable obligation to Dr. Hunter, who from an accurate mensuration of those pelvis's, where the Cæsarian operation had actually been performed in this country, and of others still smaller preserved in his museum, has demonstrated the futility of the section of the symphysis, as a succedaneum for that operation, or as a certain means of preserving both mother and child. He has besides, with great good sense, and professional knowledge, and above all, with an earnestness for the interests of humanity, which have invariably marked his character throughout life, endeavoured to counteract the intemperate praise of the College of Physicians at Paris, and prevent its influence in this country.

After stating above, that this operation had never been performed in Great Britain, it may here, reasonably be asked, why then is it necessary to publish objections against what may probably never happen? To this I beg leave to answer, that although Dr. Hunter reprobates the section, as a substitute for the Cæsarian operation, and expresses his doubts of its ever being of general use, and cautions against its precipitate admission; yet he describes a supposed case, where he thinks it might be “ a *considerable improvement* “ in practice.”

Very lately too, another Gentleman of this country, of considerable abilities and reputation, has declared in a popular book, that “ he is inclined to “ *think favourably* of this operation,” while however he sensibly and candidly acknowledges, that “ nothing but “ time and future experience can sufficiently determine whether it ought “ to be rejected or adopted.” But as
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he afterwards states at considerable length, all the objections which had then been urged against it, enters minutely into their discussion, and professes to have answered them fully; at the same time, describing an experiment made at a public hospital, in the presence of several medical gentlemen, in confirmation of his arguments against what had been generally esteemed a most material objection. Dr. Leake must be considered as a favourer, or adviser, if not a strenuous partisan, of this new operation.

It is my intention then, by this publication, in the first instance, to consider, if Dr. Hunter's opinion be well founded, that the operation, qualified by the circumstances he describes, or supposes, can ever be "*a considerable improvement,*" in practical midwifery; and afterwards to examine the arguments produced by Dr. Leake, in form of answer to the objections, but which are evidently intended to operate in ge-

general and positive favour of this operation, as a substitute for the Cæsarian section; and thus I shall endeavour to counteract the influence that such authorities might otherwise have in this country.

Lastly, as infinitely the most important, I shall collect, and present to the reader, the result of the experience of five years, during which period this operation has been performed at least four-and-twenty times in different parts of Europe. These cases had not happened when Dr. Hunter wrote on this subject; and concerning most of them, Dr. Leake, by not mentioning them, should appear not to have been informed at all; and of some, he has certainly been much misinformed, particularly that of the President Seibold of Wurtzburg, transmitted to him by Dr. Hauseman of Brunswick; or I am persuaded Dr. Leake would not have described it as a *successful* case, or offered it to the public as
fa-

favorable evidence, in support of the operation.

Upon the event of these cases must the merit of the practice rest: but as no particular account of this operation has been published in this country, and as it has engaged the attention, and divided the opinion of physicians in many parts of Europe; before I describe the cases, in which it has been performed, (and concerning which, as was my indispensable duty, I have spared no pains to procure the best information), I shall premise a short historical detail and review, of the invention and progress of this operation, from the first idea, offered by Monsr. Sigault to the Royal Academy of Surgery in 1768, to the latest publication which has come to my knowledge; from a persuasion, that such an account will not be unacceptable to many of my readers; promising however to compress it into the smallest possible volume; consistent with perspicuity, and the avowed impartiality of this essay, which obliges me
to

to consider and candidly examine the arguments adduced in favour, as well as the objections urged against the operation.

It does not necessarily fall within my intention to consider at all, much less to decide a question, which has been repeatedly discussed by writers on midwifery, from the days of Hippocrates to the present times; viz. whether the junctions of the bones which compose the pelvis, actually relax and stretch, so as to enlarge its capacity during parturition? It may however be proper just to state, that as anatomical observation demonstrates, that the intervening cartilages and connecting ligaments of the pelvis do invariably become softer, and less capable to resist any distending force as parturition approaches; and that soon after parturition has taken place, they are again restored to their pristine firmness; so it must be presumable, that this general effect of relaxation, is either intended by nature, to answer some useful purpose at all times in labour;

bour; or that otherwise, it is meant to prepare the pelvis against some particular exigence, which may occur in some labours, and' which may then require such an alteration to facilitate delivery. This anatomical observation, and the arguments founded upon it, first suggested the ingenious idea of this operation to Mr. Sigault, even admitting that Pinæus, as some think†, had recommended the same operation two hundred years ago. The expressions of Pinæus * are so equivocal (conveying at

† “ M. Sigault n'est pas le premier qui ait conçu
 “ l'idée d'agrandir le bassin de la femme dans la vue
 “ de le rendre accessible au fœtus; Severin Pineau
 “ l'avoit recommandé pres de deux cens ans avant
 “ lui, dans l'opinion ou il étoit que ce seroit en vain
 “ qu'on se delateroit l'orifice de la matrice & l'ouver-
 “ ture des parties extérieures si les os pubis ne s'ecar-
 “ toient pour le passage de l'enfant.” Baudeloque
 l'Art d'Accouchemens, vol. II. p. 231.

* “ Si enim natura ossa capitis non perfecit in
 “ utero, neque futuras ullas his effinxerit, ut deflexis
 “ ossibus & ut cumque compresso capite fœtus in
 “ enixu facilius expellantur utero, exeatque foras :
 “ quanto magis indilatandis maternis ossibus sagax
 “ &

at most but a hint) that Mr. Sigault is undoubtedly intitled to the credit of the invention; and if a cold compliment can satisfy him, after the extravagant and panegyrical language of his friends and partisans, I should be happy at this opportunity, of bearing testimony to the ingenuity and humanity of the idea; at the same time, I must beg to be excused from acknowledging the *divine inspiration* attributed to him on this occasion by Mons. Roussel de Vauzefme, “ Cl. Sigault hæc alta mente
 “ diu revolvens, solus *divino quasi af-*
 “ *flatus numine* quam monstrarat natura,
 “ viam ingreditur*.”

“ & provida eadem erit, contra eorum opinionem
 “ qui ista ossa dilatari, negant. Præterea ignobili-
 “ ores partes, nobilioribus semper ministrant & ob-
 “ sequuntur, nec non continentes, seu externæ, non
 “ tantum dilatari, sed etiam secari tuto possunt, ut
 “ internis succuratur, ut Galenus ait. At nemo
 “ sane est mediocriter in medicina versatus, qui non
 “ noverit pueros in utero contentos multo nobiliores
 “ esse maternis ossibus, pelvim, ut vulgo loquimur,
 “ constituentibus.” Sever. Pinæus, cap. 10, Opus-
 cul. & Physiolog. & Anatom. lib. 2.

* Lib. citat. p. 46.

SECTION

SECTION II.

TOWARDS the latter end of the year 1768, Mons. Sigault presented a memoire to the Royal Academy of Surgery at Paris, recommending the section or division of the symphysis pubis, as a substitute for the Cæsarian operation.

He says, that he had performed it several times, on dead subjects, and could easily gain an inch by the separation. At first he only modestly proposed to have it tried on some living animals, and then on condemned criminals. The operation, he says farther, had its friends, and opposers; but that the more general opinion was against it: and that at first, a loose objection was
made

made by the Academy, that the space gained would be inadequate to the purpose; and that the re-union of the bones might be precarious. At last, however, it was formally referred to Monf. Rufel, He made an unfavorable report, the memoir was rejected, and the operation proscribed. Monf. Sigault was not discouraged by this rejection of the Royal Academy, from again defending the same opinion in his Thesis, when he graduated at Angers, and repeating it once more at Paris, when he applied for his licence.

This idea of Monf. Sigault was communicated as a piece of medical news, in a letter from Monf. Louis, secretary to the Royal Academy, to the celebrated professor Camper of Groningen, which letter was written in March, 1769. It gives an account of the Academy being engaged in considering the Cæsar-ian operation, in consequence of its having been lately performed twice at Paris, and once with success. Monf.
Louis

Louis adds a short detail of Monsf. Sigault's project, and concludes with saying, " Il se promet plus d'avantages qu'il se pourroit vraisemblablement en retirer, & il n'a pas assez estimé les dangers," &c.

In an historical detail of any subject, it seems most regular to give a succinct analysis of the authors *seriatim*, as they published their works. I intend to pursue that method, as far as they seem to me worthy of notice, or as I have been able to procure the books themselves or any good account of them. In conformity therefore with that plan I must next review professor Camper's letter to Monsf. Van Gesscher, although it interrupts the account of Monsf. Sigault, the inventor. This letter was first published in the Dutch language, and was afterwards translated into Latin by the author himself, and reprinted with his treatise on inoculation for the small-pox, in 1774, three years before the operation was performed by Monsf. Sigault. It is entitled *de Emolumentis*
fec-

sectionis Synchronoseos ossium pubis in partu difficili. Professor Camper, not less distinguished for the universality of his learning *, than for his abilities as a physician, begins his letter with some fanciful opinions of his own, respecting difficult parturition in Holland, and a recital of some whimsical ideas collected by Haller from different travellers, tending to establish a general opinion, that in some countries well formed women naturally bear children better than in others. He highly commends the vectis and forceps as generally superseding in Holland the use of the crotchet, but acknowledges however, that he has sometimes been compelled to open the child's head, and deliver with that instrument, adding with great humanity "nunquam sine
 " summo animi dolore illis circumstan-
 " tiis reminiscor: etiam si conscientia

* See a Catalogue of his works published by himself in 1779.

" mea,

“ mea nunquam me accuset de ulla
 “ imprudentia vel crimine.—Certam
 “ tandem, dummodo possibile sit, exco-
 “ gitem methodum, qua capitis demo-
 “ litionem per unicum, æque atque Cæ-
 “ sariam sectionem evitare possim * !”

This method he supposes the section of the symphysis would infallibly prove.

He had himself taken notice twelve years ago, in a dissertation added to his edition of Mauriceau’s works, published in Holland in 1759; that “ natura ipsa
 “ monstraverit viam relaxando, & separ-
 “ ando a se invicem ossa pubis in om-
 “ nibus fere difficilibus partubus†,” and again on the same subject||, ba-
 “ sin meæ propositionis hæc inniti ex-
 “ perientia; quod natura ipsa nos
 “ doceat separatione ossium pubis insig-
 “ nem dilatationem & spatium pelvi
 “ conciliare.” He then expresses his satisfaction at the discovery, as corresponding with his own opinion, and his gratitude for the inventor, in the

* P. 122, lib. citat. † P. 123. || P. 164.

following terms of admiration “ Tan-
 “ to perfusus gaudio inventorem amba-
 “ bus ulnis amplecti voluiffem, fi li-
 “ cuiffet ab ore ejus *excellentiffimam*
 “ hanc cogitationem, vel fchema ac-
 “ cipere † !” &c. And after infor-
 ming his readers, that he had long
 quitted the practice of midwifery, and
 was not in a fituation to derive any
 lucrative advantage from the disco-
 very, that the moft benevolent mo-
 tives, could alone therefore, urge him
 to exclaim, “ Nihil præter aliorum bo-
 “ num, nihil præter univerfam utilita-
 “ tem, nihil præter concivium meorum
 “ falutem, me tanti poterat participem
 “ reddere gaudii, tanti inquam gaudii,
 “ quanto nemo adfici poteft, quam cu-
 “ jus animus jufta facile commovetur
 “ mifericordia * !”

Mr. Camper, in the firft place, en-
 deavoured to remove an objection early
 fuggefted by the Royal Academy of
 Surgery, and mentioned by Monf. Louis
 in his Letter, viz. the uncertainty of
 the

† P. 130.

* P. 131.

the re-union of the ossa pubis; this re-union, however, he ascertained beyond a possibility of doubt, by procuring the operation to be performed on a sow, by Professor Municks, Dr. Allardi, and Mr. Woldering; the creature was well, and able to walk in eight days. He likewise demonstrated in the dissecting room, that a considerable space might certainly be gained by the section; for that a child which could not be made to pass through the pelvis, with the bones united, was readily and easily extracted after the division of the symphysis had been performed. But the particulars are not sufficiently interesting to be worth relating now, because many experiments have been since made on deformed pelvis's, and what is infinitely more satisfactory, the operation itself has been several times performed on living subjects.

Professor Camper had not influence to procure a condemned criminal, which

appeared to him the most effectual manner of ascertaining the efficacy of the operation; he therefore was obliged to be satisfied with the experiments in the dissecting room, and on living animals. He concludes his Letter, as far as it particularly relates to our subject, with observing, that there are cases where neither the forceps or the vectis can succeed; in which he would recommend the section as preferable to the Cæsarian operation, because safer to the mother; and preferable to the crotchet, because safer to the child; in the case above described, says he, “ Nihil restat quam
 “ ut matri venter aperiatur, vel fœtus
 “ unco extrahatur, vel ut propositio
 “ mea, tanquam *media via* in usum re-
 “ cipiatur & approbetur †!” &c.

Professor Camper, being tinctured with the same enthusiasm which unaccountably affected all the first partisans of this new operation, has over-rated beyond all moderation, the advantages to be gained by it, and expressed himself with an

ex-

† P. 186.

extravagance unusual to men of science, but most especially to physicians. What is more extraordinary, he does not appear to have been at all aware of the future inconveniences and dangers, which might reasonably be expected to attend and follow this operation; dangers, which have been in most cases abundantly, and in some too fatally confirmed by experience. His book is nevertheless the work of a man of undoubted science, indefatigable in promoting medical knowledge, and earnestly solicitous for the welfare of mankind.

It cannot be supposed that an operation, so new in its manner, so exceptionable in many other respects, and which had been reprobated, and even proscribed by the Royal Academy of Surgery at Paris, could be presented to the public, and warmly recommended to general notice, without a critical examination of its merits, without opposition, or indeed without reprehension. Accordingly, Mons. Baudeloque, Surgeon at

Paris, and Member of the Royal Academy, previous to Monsf. Sigault's first operation on Souchot, defended a thesis * in the public schools of Paris, of which the following is his own analysis †. “ Apres avoir combattu l'opinion trop accrédité des anciens & des modernes, sur l'écartement spontanée des os du bassin dans l'accouchement soit naturel, ou contre-nature ; & avoir démontré son inutilité dans les femmes bien conformées, son insuffisance dans celles dont le bassin est vicié, & ses inconvéniens dans les unes & dans les autres, nous nous sommes attachés à prouver qu'un écartement plus considerable, procuré par la section de la symphyse du pubis, écartement que Monsf. Sigault sembloit alors n'évaluer qu'à douze ou quinze lignes au plus, ne pouvoit rendre le bassin assez spacieux pour le passage

* Ce programme a pour titre : An in partu propter angustiam pelvis impossibili, symphysis ossium pubis secanda? 1776.

† L'Art des Accouchments, tom. II. p. 235.

“ de

“ de l'enfant, quand sa mauvaise con-
 “ formation exigeoit exclusivement l'o-
 “ peration césarienne.

“ Nous n'avons établi aucun paral-
 “ lele entre ces deux opérations, confi-
 “ dérées du côté de leurs accidens ;
 “ parceque l'observation n'avoit pas
 “ encore fait connoître ceux dont la
 “ section du pubis seroit susceptible.
 “ Nous avons pensé qu'il suffiroit de
 “ faire voir que cette nouvelle méthode
 “ ne pouvoit ouvrir une voie suffisante
 “ & assez libre pour mettre la vie de
 “ l'enfant en sûreté ; & que de tous les
 “ accidens que paroïssent devoir la sui-
 “ vre, celui-ci étoit le plus grand,
 “ puisque le but qu'on se proposoit
 “ par cette opération étoit de conserver
 “ l'enfant, en épargnant les jours de la
 “ mere. L'expérience n'a pas tardé
 “ à confirmer notre jugement : chaque
 “ essai qu'on a fait de cette méthode,
 “ *a eu pour ainsi dire, sa victime ;* &
 “ le nombre pour le temps, n'en est
 “ pas petit : effet alarmant des louan-
 “ ges indiscrettes qu'on a données a

“ l’auteur de cette opération, & de l’enthousiasme avec lequel on a exagéré
“ ses faux succès.”

Upon Mons. Sigault’s communicating his opinion of this operation to Mr. Alphonse le Roy, he warmly adopted the idea, and offered his assistance to Mons. Sigault on the first favorable opportunity, this occurred in the following year, viz. September 30, 1777, when a soldier’s wife, named Souhot, fell into labour of her fifth child. In her former labours she had always been delivered of dead children. In the labour preceding this, Mons. Sigault proposed first the division of the symphyfis, and then the Cæsarian operation, with a view of saving the child; but both were rejected by ten accoucheurs, physicians, and surgeons, and the child was turned with great difficulty, and afterwards brought dead into the world. The event of that labour determined Mons. Sigault on this occasion, to perform the section without consultation; Mons. Le Roy alone assisted him. They each have

have published an account of the operation, the progress of the case, and the completion of the cure, minutely detailed respecting the symptoms in general, but not very accurately concerning some other essential circumstances; and to my comprehension the operation was not well understood, as to its probable consequences. Such as it is described, it might be deemed improper to omit. I shall therefore abridge it by selecting what appear to me the most important circumstances attending it, from the relation of *Monf. Sigault**, *Monf. Le Roy||*, or the Committee of the *Faculté de Médecine†*.

Monf. Sigault with a common bistory cut through the integuments, and *linea alba*, beginning the operation at the upper and central part of the symphysis pubis; then introducing his forefinger as a director, he cut through the ligaments and cartilage; immediately

* *Memoire de M. Sigault lu aux Assemblées de la Faculté, &c.*

|| *Recherches historiques sur la Section de la Symphyse, &c.*

† *Recit. &c. &c. par la Faculté de Médic. de Paris.*

on the completion of which, the two ossa pubis, with a peculiar noise, *spontaneously* separated two inches and a half; this was demonstrable, for Monsf. le Roy laid his four fingers into the opening. Monsf. Sigault immediately introduced his hand into the uterus, broke the membranes, and brought down the feet. Monsf. le Roy accomplished the delivery. The whole operation, both section and delivery, was finished in five minutes. The child was born alive. A ligature was applied round the body of the mother, to keep the pelvis firm. The patient having no bad symptom, was left till next day, when every circumstance continued favorable; she had passed her urine voluntarily twice, there had been no hæmorrhage, and she had suffered little pain.

October the first, being the day of the monthly meeting of the college, Monsf. Sigault and Monsf. le Roy, first describing the new operation, entreated that a committee might be appointed to examine into the state of the patient, to
super-

superintend the treatment, and report the progress and accomplishment of the cure; Mess. Grandelas and Descemet, two eminent accoucheurs, were appointed.

By their first report it appears, that the meatus urinarius was wounded in the operation; and by all the accounts it farther appears, that she went on to the sixth day without any untoward symptom, occasionally however suffering considerable pain in the sacro-iliac region of the left side. On that day however she was seized with a rigor, which was succeeded by a fever, difficulty of breathing, &c. these symptoms, were attributed to irregularity of diet, and uneasiness of mind; they continued during the next day; the discharge per vaginam was very thin, and in great quantity; she suffered acute pain, and the dressings from the wound were for the first time, on that day of a black colour. On the 11th and 12th days the discharge was exceedingly increased

creased in quantity, she was become weak and languid, and her pulse was very quick, low, and irregular. Mons. Sigault having been taken ill, the care of the patient altogether devolved on Mons. le Roy, to whom the case appeared very alarming. On the 15th day however she began to recover; but again relapsed, insomuch that on the 21st all the symptoms were aggravated to such a degree, as to induce Mons. le Roy to think she could not survive that night; she had a violent fever, suffered great pain, and the discharge was become so profuse as even to penetrate through the bed, and was obliged to be caught in a basin. This discharge by analysis was found to be urine; she recovered from this attack, but again relapsed on the 26th day, when she was seized with difficulty of breathing and rigor, her abdomen was much swelled, and her extremities became cold. The wound however was soon afterwards united, but the involuntary flux of urine continued occasionally for some days; soon afterwards with the assistance

tance of a bandage, she was capable of walking, and on the 60th day from the operation, went to the college of physicians. No inconvenience now remained, unless that while walking or standing her urine came away involuntarily, but even this inconvenience rarely happened while she continued sitting.

Such is the description of the circumstances, the symptoms, and event of the first performance of the section of the symphysis pubis, an operation that was to be regarded as one of those great and important discoveries, which was to constitute an *epoch* in the records of medicine, to be commemorated by a *medal*, and rewarded with a *pension*!

I have ventured to call Souchot's case a "hair-breadth 'scape;" the preceding history of her case, and the express words of Monf. le Roy fully prove it. I have likewise ventured to say, that although the symptoms in general were

too minutely detailed, many particular and essential ones were inaccurately stated, or flurred over, as if not well understood in their probable consequences, or otherwise meant to be secreted from the attention of the reader. In confirmation of this assertion, I have scarce the smallest doubt remaining, but that inflammation to such a degree did really take place in the Vesica urinaria, as to end in gangrene and slough; and that the discharge which was so profuse, and by chemical analysis found to be urine, passed through the opening so made, and not by the urethra. The preceding symptoms, the black appearance of the dressings on the seventh day, and the manner in which the discharge then came off, so unlike the usual way of urine passing thro' the urethra, and indeed, so unlike the manner in which it came away before that day, afford together the strongest suspicion, if not absolute conviction, that a gangrene of the bladder did then actually take place.

place. Of this, there is not the slightest hint, or even suspicion in any account of the case, altho' the probability of injury to the bladder, constitutes a priori, the most obvious and most powerful objection against the operation itself; and this grievous consequence therefore might reasonably have been expected.

Soon after Monf. Sigault's memoir and account of the operation had been published at the expence of the college, Monf. Piet, a Surgeon at Paris, practising midwifery, Conseiller de l'Academie royal de Chirurgie, and who had been present at the preceding delivery of Mrs. Souchot, among a great number of other accoucheurs, published a pamphlet*, in “ which he is strenuously against the operation, stating “ que cette section “ nouvelle ne peut produire le plus “ leger avantage sans causer des grands “ desordres; que si elle n'a pas été “ plus funeste a la femme Souchot,

* Reflexions sur le Section de le Symphyse du Pubis. La Haye & Paris, 1778.

“ c'est

“ c’est qu’elle lui étoit inutile ; &
“ qu’enfin l’état de cette femme n’est
“ pas, a beaucoup pres, aussi satisfai-
“ sant qu’on la publié*.”

One of the most material observations Monsr. Piet makes, is the result of an experiment on a dead body ; where the ossa pubis being divided two inches or twenty-four lines, the small diameter of the pelvis was very little increased, and yet the illia were separated from the sacrum three lines and a half, great part of the ligaments were lacerated, and the rest much stretched. He says, you can only gain three lines from the pubis to the sacrum by the section ; therefore where the Cæsarian operation is required in consequence of the small diameter being contracted, the section will not succeed ; and wherever it will, he thinks the forceps may. Monsr. Piet farther states, that the children of Souchot in her former labours were large, while

* P. 309.

the child of which she was delivered by the division of the symphysis, was so small as to have easily been extracted with the forceps; he further observes, that the remaining fistula of the bladder, which (by the by) fully confirms my suspicion of the injury done to that part, and her difficulty in walking afterwards, were sufficient proofs that the cure was far from being compleat.

Before I quit Mons. Piet, I must beg leave to make an extract, connected with this subject, if not immediately and directly applicable to this place. Mons. Piet says†, “Graces au recherches et à
 “ l’experience des accoucheurs mo-
 “ dernes, il y a un moyen bien plus
 “ doux qu’une section pour extraire
 “ l’enfant, et qu’on peut aller saisir la
 “ tête *au detroit superieure, & amener*
 “ *l’enfant vivant & sans le moindre le-*
 “ *sion.*”

It is reasonable to conclude, that this opinion prevails universally in France

† P. 14.

from the following expression of Monf. Sue, upon quoting the above passage from Piet, “ Cette heureuse decouverte
 “ n'appartenant pas plus à un accou-
 “ cheur qu'à un autre* ; if this is meant to refer either to the use of the forceps or vectis, or of any other contrivance, before the head of the child has entered the brim of a well-formed pelvis ; or to the possibility of bringing by any means a living child, at full maturity and of the ordinary size, through a contracted or deformed pelvis, like Souchot's, this assertion presents to us no very favourable idea of modern science, or modern practice in France, for the first is unnecessary, and the attempt not without great danger, while the last is absolutely and utterly impracticable.

In the following year Monf. Alphonse Le Roy, thought proper to favour the public with his account of this operation, and his opinion of the

* *Essais historiques, &c. sur l'Art des Accouchemens.* Tom. I. P. 315.

general merit of the practice†. Monf. Le Roy was probably envious of the high rewards granted to Monf. Sigault, and the pre-eminent station assigned to his colleague by the description upon the medal, exprefsly declaring, that he has not had his due share of reputation*.

Monf. Le Roy appears deeply tinctured with enthufiafm, confiders the divifion of the fymphyfis as the greateft difcovery of the prefent age, is outrageoufly angry with Monf. Piet for daring to fpeak difrefpectfully of this operation, and exprefsly fays of his pamphlet, “ Ce
“ titre n’eft qu’un voile que cache tout
“ la malignité poffible.”

† Recherches hiftoriques & pratiques fur la fection de la Symphyfe de Pubis pratiquée fur la femme Souchet, &c. Paris, 1777. This enquiry has been tranflated, I think very faithfully by Mr. Poignand, and publifhed here, and therefore I fhall be very fhort in my account of it.

* In confirmation, Monf. Rouffel expreffes himfelf in his account of Monf. Le Roy’s book, in the following words, “ Quanquam quæftionem fat enucle-
“ atè, perfcutatus fit, hæc tamen in eum incre-
“ pantur, quod nempe collegæ fuo M. Sigault, foli
“ inventori, & aëtori foli, cuncta prope detraxerit,
“ quæ in fe, laudis & gloriæ ultra modum cupidus, in-
“ vidiofe refunderet.” Lib. citat. p. 104.

Monf. Le Roy enters very fully into the enquiry, fo often, and as yet however fo unfatisfactorily instituted, viz. whether the junctions of the bones of the pelvis actually relax and stretch fo as to enlarge its capacity during parturition. He is ftrenuously on the affirmative fide, quotes all the authorities from Hippocrates and Avicenna to Jacques d'Amboife in the fixteenth century, to Pinæus, Riolanus, and all the later authorities.

Monf. Le Roy afterwards endeavours to account for the alleged fact in the moft whimsical manner, by fupposing that a partial folution of the bones about the pelvis takes place, and that the earthy part of thofe bones is converted to the ufe of the fœtus||. An obfervation too obvious to efcape the moft superficial reafoner, offers an infuperable objection to this

|| “ qu’il-fe fait pendant la groffeffe, fur tout du coté
“ du baffin, une diffolution du principe folidifiant de
“ la mere, *au profit de fœtus.*”

opi-

opinion, viz. that the change produced in the state of the pelvis only commences at the approach of labour, when the fœtus is already completely formed; the final cause therefore assigned to this supposed solution of the bones must be ill founded. Besides, the bones of the pelvis are never found softened, and admitting as a fact, that the cartilages and ligaments are so, they are invariably restored to their pristine state of strength very soon after delivery, which could not possibly happen, had they been actually deprived of their “*principe solidifiant.*”

Monf. Le Roy then enters into a minute and tedious detail of Mrs. Souchot's case, corrects some mistakes in the manner of performing the operation and subsequent treatment, quotes two other successful cases in confirmation of the utility of this practice, which will be noticed in another section; and then

concludes with an opinion sensibly and modestly expressed, that this operation may (when required) be several times repeated on the same patient, with efficacy and safety.

SECTION

SECTION III.

SOON after the publication of Mons. le Roy's *Recherches, &c.* and about a year after the first operation, Dr. Hunter favoured the world with his reflections on this subject, they were published in addition to Dr. Vaughan's account of the Cæsarian operation, which had lately been performed at Leicester.

I have in a former place expressed my opinion and general approbation of the intention and effect of those reflections, but I then stated that Dr. Hunter had described a case, where he thinks, the division of the symphysis pubis might be a considerable improvement; and that one purpose of the present publication, was in the first instance, to enquire,

whether the case, qualified by the circumstances Dr. Hunter describes, or supposes, ever does, or can exist; and afterwards to endeavour to prove, that if such a case should really happen, this operation never can be applied to its relief, with efficacy and safety; and thus I hoped to prevent the influence such opinion and authority might otherwise justly be entitled to, in this country.

After stating his reasons for preferring the use of the crochet, to the division of the symphysis pubis, and saying that nothing but the interests of humanity, had urged him to consider this subject, Dr. Hunter proceeds thus, “ I must add after
“ all, that the section of the symphysis,
“ may possibly be found to be a much
“ better resource, than the Cæsarian
“ operation, in a very few rare cases,
“ not to save the child, but to save the
“ mother, which I think a much
“ greater object;” and again, “ but
“ supposing a case where no success can
“ be expected from the crotchet, either
“ on

“ on account of the extraordinary nar-
 “ rowness of the pelvis, or partly from
 “ that circumstance, and partly from a
 “ great projection of the lumbar verte-
 “ bra, over the cavity of the pelvis,
 “ hardly allowing any part of the child,
 “ to come within the safe reach of the
 “ crotchet, in such a case, instead of
 “ the Cæsarian section, which is dread-
 “ ful, because so generally fatal to the
 “ mother; this new operation may be
 “ found to *give the mother a good*
 “ *chance for life, and tolerable health,*
 “ if it will make room sufficient for
 “ bringing the child within the sphere
 “ of the crotchet. This, though it
 “ could only be advisable in exceeding
 “ few cases, *might be a considerable*
 “ *improvement,* because it would have
 “ the advantage over the Cæsarian ope-
 “ ration, of saving the mother, instead
 “ of the child*.”

* P. 36, 37.

The whole contents of this quotation are founded on a supposed case, which I believe never did, or can happen. I am persuaded there never existed a pregnant woman, with a pelvis so small, and its cavity so contracted, or its upper aperture so much lessened, by the projection of the last lumbar vertebra, as not to allow the child to come “with-
“ in the safe reach of the crotchet;” but admitting the fact possible, I am convinced that no additional space, which could be gained, by the division of the symphysis, “will make
“ room sufficient, in such a pelvis,
“ to bring the child, within the
“ *safe reach, or sphere of the crot-*
“ *chet.*” The space gained from pubis to sacrum by the division of the symphysis, may be about four lines, or one third of an inch at most, and to procure even that space, the ossa pubis must be separated compleatly, two inches and a half. Wherever the pelvis is so very small, that the Cæsarian operation

ration, according to Dr. Hunter's opinion, would have become necessary; it is clearly impossible, that the additional space of four lines, should render delivery by the crotchet, either safe, or practicable.

But when we advert to the maimed and weakened state of the pelvis, and its consequent inability after the division of the symphysis, to sustain the violence and repeated exertions, unavoidable in the use of the crotchet; and at the same time, when we reflect upon the mischief, that the soft parts must inevitably suffer from the division, particularly those which lie immediately behind, and in contact with the ossa pubis; first, by being torn from the bones to which they are naturally connected, afterwards, by being exposed for a considerable time to the external air, and last of all, by being pressed against the divided edges of the bones, in the passage of the child's head; when, I say, all these circumstances are considered,

we

we must conclude, that the operation in the case supposed by Dr. Hunter, instead of “ *giving the mother a good chance for life, and tolerable health,*” will be as certainly fatal to her, as the crotchet must have already proved to the child. The difficulty and extreme danger of this particular situation, tho’ most reasonably to be expected, do not however rest upon assertion, conjecture, or opinion; Professor Guerard’s case (to be related by and by) is exactly in point, and confirms by experiment, what was to be expected a priori. The child’s head in that case was opened, after the division of the symphyxis had been performed, but the professor was, notwithstanding, foiled in every attempt to deliver, both by the forceps, and crotchet, and the event in the end proved fatal to the mother*. Yet this unfortunate woman’s pelvis, measured *two inches and a half*, from pubis

* “ In tantis rerum angustiis, ad ultimum tam diu
“ confugerunt remedium, perforarunt nimirum cra-
“ nium

pubis to sacrum, dimensions by no means requiring either the Cæsarian operation, or the section of the symphysis. The event of this case demonstrates a fortiori, the danger and inefficacy of the practice in Dr. Hunter's supposed case, or where the pelvis is so small as to require the Cæsarian operation. It may likewise not be improper to add, that the diameter from pubis to sacrum was in this case only increased *two lines* by the separation of the ossa pubis†.

To divide the symphysis pubis, merely to make room to destroy the child, and afterwards extract it with the crotchet, is to defeat the very end and intention of the operation, and to deprive it of the

“nium magno negotio, effluente cerebro cranium
 “paululum magis decendebat, unci applicatio locum
 “non habebat nec non etiam forceps, & licet quidem
 “ossa quædam obripiabantur, *caput tamen semper*
 “*manebat immotum.*” Guerard. lib. citat. p. 14.

† “Pelvis diametri nunc accuratius lustrare vale-
 “bant & quidem conjugata naturalis erat $2\frac{1}{2}$ pollicum
 “Paris. Eadem diameter ducta promontoreo ossis
 “sacri ad pubis ossa a se invicem remota, *duabus*
 “*solummodo lineis erat major.*”

only

only specious, the only possible excuse, that can be made for it; it is to expose the mother to great pain, and extreme danger, without necessity, and without even the possibility of an equivalent. Notwithstanding the respect I always entertain for Dr. Hunter's opinion, and the diffidence of my own on the comparison, I cannot in this instance but highly disapprove of that trifling and unmanly want of decision, which, while it reprobates the operation upon the principles and with the view which originally gave rise to it, unaccountably substitutes an imaginary necessity, in order to recommend that practice as a "considerable improvement," which I am bold to say, *no circumstance whatsoever, real or imaginary*, can even render a warrantable operation.

I cannot conclude the review of Dr. Hunter's reflexions on this subject, without expressing my astonishment, that a man of his extensive knowledge and excessive caution, should not have been
aware

aware of the injury the soft parts might suffer in this operation, although such injury seemed obviously to be expected a priori, and has been uniformly to a certain degree, and in many instances, even fatally confirmed by experience.

Monf. Rouffel de Vauzefine † in the following year published a Thesis which he had before defended in the schools at Paris. As it contains a very particular and circumstantial account of the operation, and an historical detail of its progress, and success, as well as much other curious matter, I hope to be excused for being very particular in my analysis of it.

Monf. Rouffel seems to have entertained the most extravagant, and the most preposterous opinion of the benefit, which was in future to be derived to society by this invention; he has even exceeded the Faculté de la Médecine in expressions of enthusiasm, for he sets out with directly, or obliquely com-

† De Sectione Symphyseos ossium pubis admittenda.
Paris 1778.

paring it to some of those great discoveries, which have so rarely happened, as to form epochs even in the history of the world.

He slightly and indeed only obliquely mentions *Columbus*, and particularly the severity of treatment he experienced after his singular discovery of America, but immediately adds, “ Erras graviter si sectionis symphyseos actorem, “ *gloriæ inventionis secure potitum credideris.*” He then describes and reprobates the various and improper means used by the adversaries in depreciating this great discovery; and then adds, “ Nil mirum eadem omnes clavorum inventorum auctores fors manet,” and in direct words compares the treatment of *Monf. Sigault*, with the supposed treatment of *Harvey* on his discovery of the circulation.

He next endeavours to rescue the fame of *Monf. Sigault* from the envy of the present generation, and to rest it on the opinion of posterity, when, as he

he expresses it, “quem merito *apud* “*ultimos semper collaudandum* conjici-
 “mus,” and after stating that some foreign societies have adopted the operation in conformity with the Faculté de la Medicine at Paris, he prothetically exclaims “non longam post clapsam annorum seriem, *inter operationes maxime salutiferas* annumeretur.” The whole preface is the most curious composition of extravagance of sentiment and expression, that the most ingenious in the art of puffing, (even in that country) can combine together.

Monf. Rouffel de Vauzefme arranges his matter in five distinct chapters. In the first he gives only a short description of the child's head, the pelvis, and a view of natural labour; corrects some mistakes both of the ancients and moderns, congratulates the world on the discovery of this operation, and promises to shew how nature pointed it out to the discoverer.

In the next chapter, with becoming industry, he collects all the authorities both ancient and modern, and with considerable ability demonstrates, as he supposes, that the cartilages and ligaments of the pelvis swell and relax during gestation; and by that means the capacity of the pelvis is enlarged to a useful degree in parturition. To account for this effect satisfactorily, he adopts the following whimsical opinion of *Monf. Le Roy**, viz. “that during gestation, nature seems to produce a solution of that principle which gives solidity and firmness to the body, particularly to the bones and cartilages of the pelvis.” He then reverts to all the more ancient, and many modern authors, particularly to *Monf. Bertin*, as the latest and highest authority; and after expressing much surprize, that no person who had acknowledged this fact, should have thought of

* “*Eo tunc tempore principii solidificantis solutionem moliri natura videtur.*” P. 39.

assisting nature's endeavours by the same means, he at length arrives at the summit of his complimentary climax in the following words, which I must beg leave to repeat, "At tandem Cl. Sigault, D. M. P. hæc alta mente diu revolvens "*solus divino quasi afflatus numine* quam "monstrarat natura viam ingreditur," and concludes the chapter with an account of Mons. Sigault's proposal to the Royal Academy, their rejection of it, Mons. Le Roy's adoption, &c. all of which have been related before.

In the third chapter he says, that when the deformity of the pelvis is discovered in time to be certainly such, as that a child at full maturity cannot be extracted through it with safety; he thinks premature labour may be brought on in the seventh or eighth month, in the same manner as has been recommended in uterine hæmorrhages*, by Puzos, Trautmann, &c. and which

* Page 68.

he further says, has been practised with success, to prevent the Cæsarian operation in a very small pelvis by Monf. Vacher de la Feutrie. But he adds, “ if utero
“ gestation is advanced to the ninth
“ month before the deformity be discovered, in that case, the section of the
“ symphysis pubis is to be immediately
“ resorted to as the *only remedy*.” He next endeavours to ascertain what are the dimensions of the pelvis which require this operation, because not admitting assistance either from the vectis, or forceps; and he states the distance of two inches and a half from pubis to sacrum, as the precise dimensions, for this reason; because immediately upon dividing the symphysis, the two ossa pubis will separate *two inches and a half*, and by such a separation the short diameter of the pelvis from pubis to sacrum will be enlarged *six or seven lines*; and he thinks such an additional space will be sufficient to permit any living child to pass through, or at least, that a considerable
por-

portion of the head may be squeezed into the opening between the divided ossa pubis, and thus “*quasi per viam regiam & patentem feliciter erumpet*” infans. He then describes a genuine *enclavement*, where the head of the child having entered the brim of the pelvis is so impacted in the cavity that it can neither descend, nor be pushed up; in this case, after the forceps have failed, he recommends the section in preference to the crotchet, calling it “*sola salutis anchora*,” and adds “*hæc sola vincit, triumphat**.”

After allowing however that in monsters, in extra-uterine conceptions, &c. the Cæsarian operation may be done, he expresses his earnest wishes that it might be altogether expelled from the present practice, “*Nos modo in votis vehementur habemus ut oblivione fere perpetua jaceat hæc operatio*,” and both in the text, and the notes he contrasts

* Page 78.

the fatal consequences of the Cæsarian operation with the mild and beneficial effects of his “*simplicissima & tutissima*” “*simul sectio symphyseos.*” He concludes the chapter with the usual extravagance of expression, saying, that now all women “*nec ægre, nec periculoso, divinitus missæ* sectionis symphyseos auxilio parturire potuissent||.”

The fourth chapter contains the method of performing the operation, which being exactly the same as before described, it is unnecessary to repeat; except indeed, that he advises, what to me seems altogether unnecessary, viz. that two assistants should lay their right hands firmly on the illia, to prevent the violent and sudden separation, which might otherwise rupture the anterior sacro-illiac ligaments; an accident, he says, much apprehended by the *Cæsarians*. The delivery is thus accomplished in a few minutes, by his account, *with-*

out pain, and without danger. He adds, that perhaps one of the *crura clitorides* may be cut, but that neither the bladder or meatus need be touched, nor any large vessels or nerves necessarily wounded; he then exultingly asks, “quid igitur peracta, *pertimescendum?* Dolores, rupturas, effusiones, inflammationes, coalitus impossibilitatem, *delusæ imaginationis phantasmata vere dixerim.*” And if any other imaginary dangers alarm, he boldly appeals to experience, as “*rerum potior magistra*,” to dispel them. How far those alarming symptoms just described by Mons. Roussel, are to be considered as “*delusæ imaginis phantasmata*,” and how far experience, his “*rerum potior magistra*” will stand him in any essential stead to establish his doctrine, or even justify his confident appeal to her, the fatal event of several cases to be presently recited, will too satisfactorily demonstrate!

Monf. Rouffel next describes the particulars of Mrs. Souchot's case as already detailed. He then states, that the operation has been performed ten times, and adds "*Huc usque res prospere*
"*cedentes, jam inventionis eximiae invi-*
"*dis aut assensum, aut silentium impe-*
"*rant*.*" And in a note he describes all these cases, some in a very accurate manner, while others are only slightly mentioned. But the history and event of those cases belong to another section, where I purpose to collect together all the facts which have come to my knowledge.

Monf. Rouffel farther ventures to prognosticate, that the operation may *without danger* be repeated two, three, or even more times on the same patient.

The last chapter is only a compendious recapitulation of the contents, but with some expressions which ought not to pass unnoticed. After repeating again the circumstances requiring

* Page 96.

the Cæſarian operation, and giving the preference to the diviſion of the ſymphifis, and applying to the event of Souchot's caſe, and the repeated experiments ſucceſsfully made in various countries, he emphatically exhorts, “ Nova igitur
 “ in promptuarium artis accipiatur ope-
 “ ratio quæ cito & tuto perficitur, quam
 “ ipſamet *natura commonſtrat, expoſtulat,*
 “ *adjuvat* ; quæ fœtum in auras vitales
 “ evocat, *nullo parturientis discrimine**,
 &c. and again repeats “ that nature †
 “ points out this operation, and that
 “ experience by the *happieſt effects, has*
 “ *confirmed its utility.*”

Such are the chief contents of Monſ. Rouſſel's book, which I muſt confeſs is the defence of an able advocate, who avails himſelf of all ſorts of means in favour of his client, and a bad cauſe, and who makes ample amends for every deficiency of proof, by bold aſſertions, and panygerical declamation. For

* Page 110.

† Page 111.

were all his extravagant accounts of the beneficial effects of this new-fangled operation to be collected together, and considered as genuine evidence, it would be the *safest, easiest, and most perfect remedy* ever invented by the ingenuity of man.

SECTION

SECTION IV.

DR. J. C. Loder, Professor of Anatomy, Midwifery, &c. at Jena, and who is at present in London, has been so obliging as to favour me with his Dissertation * on this subject. It is a very able and ingenious defence of this operation, founded upon theory, and a very accurate anatomical knowledge of the parts concerned. But the professor, never having performed the operation, and of course not knowing the material objections from experience, I trust his

* I had before seen an abstract of it in the New Bibliotheca Chirurgica published by S. H. de Virgiliis Von Creutzenfeld in 1781 at Vienna, which he had taken from Richter's Chirurg. Bibl. where it had been highly recommended as an accurate treatise on the subject.

candour will not permit him to expect much respect to be paid to his theoretical recommendation at this time, when the operation has been tried between twenty and thirty times, under all the real and different circumstances, supposed by the partisans to require and justify it.

Professor Loder seems to have entertained the same unaccountable predilection for this new operation, that all the other early partisans did, and which first induced him to adopt the same extravagant expressions, as “ primo inde tem-
 “ pore quo mihi innotuit, *utilissimis*
 “ *nostri ævi inventis* adnumerandum esse
 “ censui,” adding “ & nunc minime
 “ dubia aliorum experientia confirma-
 “ tus methodi hujus *præstantiam*, quan-
 “ tum†, &c. and which afterwards prevented him from supposing any danger could happen from it; or otherwise he certainly would not have recommended it in the following manner, instead of the forceps; after quoting from Stein an opinion, that the Cæsarian operation is always
 ne-

† P. 34.

necessary when the small diameter of the pelvis does not exceed three inches, he adds, “Nec ubi tres pollices & dimidium, minor pelvis diameter æquet, forcipi locum esse credimus, *sed potius synchondroseos dissectionem commendamus.*” And he afterwards speaks of the *febricula* only, which may succeed the operation. He then recites Mons. Sigault’s and Professor Seibold’s cases, and which he thinks combined with Camper’s experiments: “Satis demonstrant, quantum utilitatem ostendat Sigaultiana sectio, quibus in casibus præcepue commendanda sit, quantisque laudibus extollendus sit ejus inventor quem, si qua meritorum justa sit æstimatio, humanum genus hac ista privare nequit.”

Dr. Emanuel Bentely chose this operation † for the subject of his inaugural Thesis, when he graduated at Strasburg, in the year 1779.

† De Sectione Synchondroseos Ossium Pubis.

Dr. Bentely begins with a minute and accurate description of the union of the bones of the pelvis; he particularly endeavours to ascertain that the intervening cartilages differ from the cartilages placed between the vertebræ of the spine; and after describing all the ligaments which unite the bones of the pelvis, from Weitbreght's Syndesmologia, he recites the arguments and authorities for the bones separating in labour, upon which this operation was first founded. He is disposed to believe, that although the ossa pubis may be separated one inch and a half, or even two inches, yet the space gained in the diameter from pubis to sacrum will never exceed four lines. To ascertain that fact he holds to be of the first importance, towards determining the merit of the operation, and therefore gives eleven experiments; five made by Ripping, in the Hotel Dieu at Paris; and six by Professor Lobstein at Strasburg, all of which appear to have been accurately made and faithfully described.

scribed. In the five experiments made by Mons. Ripping†, he never gained quite four lines from pubis to sacrum; and in the six experiments made by Professor Lobstein, it appears, that in one only he gained three lines, and in that case the ossa pubis were separated two inches and a quarter; but that by extreme violence separating them three inches, he gained six lines or half an inch, but then he observes, all the soft parts attached to the arch of the pelvis were torn open, as well as the ligamentose membrane uniting the illia and sacrum. Two of these experiments being made on the bodies of women, one of whom died in child-bed, and the other during utero-gestation, and therefore in point, I have subjoined below the whole description of them, not only to prevent any mistake, but likewise as a satisfactory specimen of the accurate manner in which they are made*.

Dr.

† Ripping Dissert. sistens quasdam de Pelvi animadversiones. Ludg. Batav. 1776.

* “ In fœmina 22 circiter annorum, sexto fere mense graviditatis, hydrope mortua statim post mortem
sec-

Dr. Bentely recites all the common objections to this operation, such as the dif-

“ sectio Cæsarea instituebatur, foetus autem jamjam
 “ mortuus extrahebatur; quo facto dein symphyfin
 “ ossium pubis lustrando, eorum ossium mobilitas clare
 “ observabatur.

“ Facta nunc sectione ossium pubis absque ulla le-
 “ sione partium subjacentium, pubis ossa sponte a se
 “ invicem secedebant 4 lin.

“ Levi femorum diductione ad 1 poll. $4\frac{1}{2}$ lin.

“ Majori diductione = 2 poll. 4 lin.

“ Partes tunc subtus jacentes in extremo fissionis
 “ periculo versabantur.

“ Aperto cadavere diametri naturales pubis ossibus
 “ ad se invicem adductis tales erant.

“ In apertura superiori.

“ Conjugata = 3 poll. 9 lin.

“ Transversa = 5 poll. 1 lin.

“ Obliqua = 4 poll. 8 lin.

“ In apertura inferiori.

“ Transversa = 3 poll. 11 lin.

“ Diductis pubis ossibus ad 2 poll. 3 lin.

“ Diametri tunc sic sese habebant.

“ In apertura superiori.

“ Conjugata = 4 poll.

“ Transversa = 5 poll. 6 lin.

“ Obliqua = 5 poll. 6 lin.

“ In apertura inferiori.

“ Transversa = 4 poll. 11 lin.

“ Diductis pubis ossibus ad 3 poll.

“ Diametri erant in apertura superiori.

Con-

difficulty and danger of the section, the injury likely to ensue to the sacro-iliac joints,

“ Conjugata = 4 poll. 3 lin.

“ Transversa = 5 poll. 9 lin.

“ In apertura inferiori.

“ Transversa = 5 poll. 3 lin.

“ Disruptæ autem tunc reperiabantur hinc inde partes molles arcui ossium pubis subjacentes, nec non etiam membrana illa ligamentosa synchondrosin sacro-iliacam intus in pelvis cavo obvolvens.

“ Institutum fuit in puerpera octavo die post partum mortua.

“ Diametri naturales erant sequentes.

“ In apertura superiori.

“ Conjugata = 3 poll. 10 lin.

“ Transversa = 5 poll. 3 lin.

“ In apertura inferiori.

“ Transversa = 4 poll. 6 lin.

“ Facta sectione, diductisque pubis ossibus ad 1 poll.

“ Conjugata erat = 3 poll. 11 lin.

“ Transversa = 5 poll. 8 lin.

“ In apertura inferiori.

“ Transversa = 5 poll. 4 lin.

“ Diductis pubis ossibus ad $1\frac{1}{2}$ poll.

“ Conjugata erat = 3 poll. $11\frac{1}{2}$ lin.

“ Transversa = 5 poll. 9 lin.

“ In inferiori apertura.

“ Transversa = 5 poll. $8\frac{1}{2}$ lin.

“ Diductis pubis ossibus ad 2 poll.

“ In

joints, the consequent instability of the body, from the weakness of those joints and of the symphysis pubis, particularly the latter, which Ripping relates, continued till death, in all the dogs except one, that were the subjects of his experiments. I have quoted the passage below, from Bentely, as I have not been able to procure Ripping's dissertation†. He far-

“ In apertura superiori.

“ Conjugata erat = 4 poll. 1 lin.

“ Transversa = 5 poll. 10 lin.

“ In apertura inferiori.

“ Transversa = 5 poll. 11 lin.

“ Remotis pubis ossibus ad $2\frac{1}{2}$ poll.

“ In apertura superiori erat :

“ Conjugata = 4 poll. 2 lin.

“ Transversa = 6 poll. 2 lin.

“ In inferiori apertura.

“ Transversa = 6 poll. 4 lin.

“ Ossa innominata pro ratione diductionis ossium

“ pubis etiam ab osse sacro in antica sui parte

“ secedebant seseque ab illo separabant.”

† “ prouti Ripping (Diff. cit. § 36, p. 38) observavit in canibus huicce operationi propositis, in quibus sanatio facta fuit ope substantiæ ligamentosæ ab exteriori & inferiori parte hanc synchondrosin
“ uni-

farther thinks, that if in the operation, either the cartilages or the bones be wounded, and the parts are to be made whole by suppuration taking place, and callus forming; it is highly probable that a caries of the bones will ensue, and that the wound will remain *fistulose*, as was really the case with the woman at Wurtzburg, for near a year after the operation. The union of the bones is greatly prevented, he says, from the difficulty of keeping them without motion a proper time; for the abdominal muscles being inserted into the ossa pubis, the slightest motion of these, must move one or other of the divided bones. He concludes by saying, that where the contraction of the upper aperture of the diameter from pubis to sacrum, is such as to require the Cæsarian operation, the small space of *three or four lines*,

“ unientis, intermedio nulla substantia repleto, syn-
 “ chondrosis etiam semper erat *mobilis usque ad ne-*
 “ *cem*, dum nunquam nisi *in uno*, in quo nempe of-
 “ seam substantiam læserat, calli vestigium offende-
 “ rit.” sect. LVII. p. 61.

which is all that can be gained by the division, will never be sufficient to answer the purpose of that operation. If the contraction be at the lower aperture, and a sufficient space could be certainly procured by it, yet the dangers and difficulties attending it are such as to render the event very doubtful.

In the same year, 1779, Dr. J. P. Weidmann published his thesis at Wurtzburg in Germany*. He was led to chuse this subject, partly from its novelty, and importance, but principally, as he says, from having fortunately had an opportunity of seeing, both the Cæsarian operation, and the division of the symphysis performed by the President Seibold, whose case of the latter operation we shall have occasion to take more particular notice of, by and by.

Dr. Weidmann, with great modesty, says, he does not pretend, absolutely to

* “ Comparatio inter sectionem Cæsariam, & dis-
 “ sectionem cartilaginis & ligamentorum pelvis, in
 “ partu ab pelvis angustiam impossibili, suscipien-
 “ das.” Wuecburgi 1779.

determine the merits of the two operations ; he only means to offer the two cases to the consideration of his readers, to state and compare the difficulties and dangers, the advantages and inconveniences of each operation, hoping, that some benefit may be thereby derived both to the profession and to the public, and that abler and more experienced men, and of greater proficiency in the art, will bestow their attention upon this subject, and that certain rules for preference may by that means be established.

He first gives a short historical detail of the Cæsarian operation, from the first performance by Nafer at Siegershausen, as described by Caspar Bauhin, in his Appendix to Roussetus, even to the cases which happened lately in this country. He then recites the particulars of a case where the Cæsarian operation was performed by the President Seibold, at which he was present and acted as assistant, and where it ended fatally ; he

accurately describes the dissection of the body, and particularly the dimensions of the pelvis; by which it appears, there was a space of *two inches and seven lines* from pubis to sacrum. He afterwards gives a short historical detail of the section of the symphysis, in which he corrects some considerable mistakes, in the account of two or three of the cases to be related in the next section. He then describes the President Seibold's case of the division of the symphysis, at which he was likewise present, with every possible degree of accuracy, and even to a wearisome minuteness.

He thinks, that if the division of the symphysis ought ever to be performed, it is only where the diameter from pubis to sacrum measures three inches, where the head presents and is not very large; but even in that case, he asks “ whether it may not be better to bring on
“ labour at the seventh month? for by
“ that means less danger will be incurred by the mother, and probably the
“ child

“child may be delivered alive.” He says, the Cæsarian operation is indicated in every deformity, where a child cannot by any other means be certainly born alive, thus implying a most injudicious prejudice against the use of the crotchet, and to my comprehension, a most unwarrantable predilection for the child’s safety in preference to the mother’s, and which he further explains and enforces in his *Positiones ex universa Medicina*, at the end of his Thesis, by saying, “*In fetum vivum, uncas & perforatoria adigere, nefandum facinus est*†.

While this operation engaged the attention of many ingenious men in Germany, it became a party affair at Paris, between the Faculté de la Médecine, and the Surgeons of that city, as stated by Monsr. Sue, who in taking a comprehensive review of the subject from the first performance to the time

† P. 54.

he wrote, includes an account of Mess. Herritier, Etienne, Pellaton, &c. He particularly describes and reprehends this dispute, but disapproves of the ridicule thrown upon it by an author of some wit, who in a letter from a supposed Countess proposes to erect a Statue to Mons. Sigault, “ *Ce mortel le plus honoré, & le plus fêté, qui eut jamais été**.”

Mons. Baudeloque † enters very fully into the examination of this subject, and relates the following observations, as the result of a number of experiments made in the Hotel Dieu.

After the division of the symphysis, when the thighs were moderately separated, he says the two ossa pubis were from three to six lines asunder; and that the ossa pubis never could be separated two inches and half, without the thighs being brought to right an-

* *Essais historiques sur l'Art des Accouchemens*, page 296.

† See *l'Art des Accouchemens*, Tom. 2, P. 230. Paris 1781.

gles with the trunk; nor without laceration to the sacro-illiac ligaments, which began earlier or later, according to the particular dimensions of the pelvis. In one pelvis of three inches and a quarter diameter, from pubes to sacrum, the ossa pubis were not separated one inch, before the sacro-illiac symphyse were opened, one a line and a half, the other a line; and when the ossa pubis were separated two inches and a half, one of them was open to five lines, and the other to three lines and half, and the periosteum and ligaments were torn on both sides. And he further observed, that the ossa pubis never were equally removed, and hence the sacro-illiac symphyse were differently opened, from two to seven lines. He likewise says, whenever the external wound was two inches and half in extent, it was invariably torn both above and below, and sometimes to several fingers breadth. He observes from the result of his experiments, that the short
dia-

diameter is increased from four to six lines by a separation of the ossa pubis to two inches and half; a space by no means sufficient to make amends for the disproportion between a child's head and dimensions requiring the Cæsarian operation, especially as the space gained by it could only enlarge the transverse diameter. Mons. Baudeloque however allows, with the partisans of the section, that a greater space may be procured by it in a contracted than in a well-formed pelvis; and that if the small diameter is not naturally more than fourteen or fifteen lines, he thinks nine lines may be gained, if the ossa pubis are separated two inches and half; but if the child's head is of the usual size, the small diameter from one parietal bone to the other is three inches and half, and thus there will still remain fifteen or sixteen lines more in the volume of the head, than in the capacity of the pelvis, of what essential

sential use then, he asks, can the operation be, even in that deformity?

He then endeavours to discredit Mons. Le Roy's account of his operations, where, in one instance, he says, the side of the child's head, and in another, the occiput insinuated itself into the opening of the symphysis. He takes great pains to correct a mistake that the partisans of this operation have always made, by supposing, that when a certain space was wanting to either diameter at the upper aperture of the pelvis, if that space was gained, whether to the diameter wanting it, or the other, the benefit would be the same; but the fact he observes is undoubtedly otherwise, for no additional space gained to the long diameter will at all make amends for a deficiency in the short one, where it is only wanted. He severely reprehends the President Seibold for his reasoning on the case where he performed this operation, particularly for acknowledging and regretting that he "*(un homme veritablement instruit)*"
could

could not resist the *allurements* of this new method of delivery. He next proves, that the two illia must be removed from the sacrum, in proportion as the ossa pubis separate, except at the posterior edge; and he then concludes that this edge, assisted by the position of the body on a hard table, will press the os sacrum inwards, and thus to a certain degree, this pressure must have a tendency to lessen the short diameter. Mons. Baudeloque after concluding the proofs of the inadequateness of the operation, to procure a sufficient space to answer the intended purpose, assures the most zealous friends and partisans, (notwithstanding Mons. Le Roy's assertion) that * it is not prejudice, but conviction, which has induced him to take a decided part against this operation. He then accurately examines the success of the cases which had come to his knowledge; but that part falls into the intention of the next sec-

* P. 254.

tion. Partly however to examine the effects of the operation in a pelvis of such a degree of deformity as to require the Cæsarian operation; but especially to discredit Mons. Le Roy's case of Belloy (which will be more particularly considered by and by) Mons. Baudeloque recites the following experiment, which though very long I hope to be excused, for transcribing as it is singularly and exactly in point, the woman having died after the Cæsarian operation.

“ Cette expérience fut fait a l'Hôtel-
 “ Dieu de Paris, le 15 Août 1779, en
 “ présence de M. Moreau, Chirurgien-
 “ Major dudit Hôpital, de MM. De-
 “ leurie, Coutuli, Trainel, L'héritier,
 “ Maîtres en Chirurgie, & d'un grand
 “ nombre d'élèves, sur une femme qui
 “ étoit morte le onzieme jour après
 “ l'operation césarienne, pratiquée à la
 “ ligne blanche. Cette femme étoit
 “ infiltrée: ce qui ne paroîtra pas in-
 “ différent à observer, à cause du re-
 “ lachement des symphyfes.

“ Le

“ Le cadavre étant placé sur le bord
“ d’une table, les jambes écartées &
“ soutenues, comme le recommandent
“ les partisans de la section du pubis,
“ nous nous assurâmes, par divers pro-
“ cédés, de la longueur du petit dia-
“ metre du détroit supérieur, que nous
“ n’évaluâmes qu’à *un pouce huit*
“ *lignes* : on s’assura de suite, par le
“ moyen du compas ordinaire rapporté
“ au pied de Roi, qu’il n’avoit pas da-
“ vantage, & que le diamètre transver-
“ sal étoit de quatre pouces trois lignes.
“ On prolongea supérieurement la plaie
“ de l’opération césarienne, afin d’enle-
“ ver la matrice, & de pouvoir placer
“ dans le bas-ventre un enfant dont on
“ engagea les pieds dans le bassin.
“ La tête de cet enfant n’avoit que
“ *trois pouces cinq à six lignes de dia-*
“ *metre, dans sa plus grande épaisseur*
“ *transversale*, & le tronc étoit très-
“ maigre. Nous avons eu le soin d’en
“ pétrir en quelque sorte, toutes les
“ parties, & sur-tout la tête, pour leur
“ ren-

“ rendre la souplesse que la mort avoit
 “ pu leur enlever. On entreprit de
 “ tirer cet enfant par le pieds ; mais il
 “ fallut employer les plus grandes for-
 “ ces, pour faire passer les fesses à tra-
 “ vers le détroit supérieur, quoique
 “ dans la direction la plus convenable,
 “ & pour y engager la poitrine jusqu’
 “ aux aisselles. Ce fut dans ce moment
 “ qu’on fit la section du pubis.

“ On découvrit la symphyse au mo-
 “ yen d’une incision de deux pouces &
 “ demi, conservant en en-bas la com-
 “ missure antérieure des grandes levres ;
 “ & supérieurement une étendue au
 “ moins de dix-huit à vingt lignes, au-
 “ dessous de l’angle inférieur de la plaie
 “ de l’opération césarienne, qui étoit
 “ dans la même direction. On coupa
 “ la symphyse avec les précautions re-
 “ quises, & les os pubis ne s’écartèrent
 “ d’abord que de *neuf ligne*, malgré le
 “ coin que formoit en-dedans le corps
 “ de l’enfant. On augmenta cet é-
 “ cartement, le plus graduellement pos-
 “ sible,

“ fible, *jusqu'à vingt & une ligne*, en
“ éloignant les cuisses du sujet : mais
“ pour le porter à deux pouces & demi,
“ il fallut tirer fortement sur les han-
“ ches. Ce fut à ce dernier degré
“ qu'on essaya de faire passer la tête,
“ qui s'étoit placée d'elle-même dans
“ une direction transversale, l'occiput
“ regardant le côté gauche du bassin &
“ la face le côté droit ; de manière
“ qu'une des bosses pariétales répondoit
“ à l'écartement des os pubis, & l'autre
“ à la partie latérale gauche de la saillie
“ du sacrum ; position sans contredit,
“ la plus favorable à l'affaïssement & au
“ passage de la tête.

“ Plusieurs personnes exercèrent leurs
“ forces, successivement, sur le tronc
“ de l'enfant, & en tirant aussi sur la
“ mâchoire inférieure au moyen de
“ deux doigts introduits dans la bouche,
“ sans pouvoir faire descendre la tête.
“ Après un quart-d'heure & plus de
“ tentatives inutiles, pendant qu'un de
“ mes confreres tiroit de toutes ses
“ forces

“ forces sur le corps de l'enfant, & un-
 “ autre sur les pieds, en observant la
 “ meilleure direction possible, j'ap-
 “ puyai fortement d'une main sur la
 “ tête, en la comprimant selon son
 “ épaisseur transversale, & en dirigeant
 “ mes efforts de manière à faire descen-
 “ dre le menton : ce fut alors qu'elle
 “ franchit le détroit supérieur.

“ Dans ce moment, l'angle inféri-
 “ eur de la division des tégumens se
 “ déchira jusqu'à la vulve, & l'angle
 “ supérieur se rapprocha tellement de
 “ la plaie de l'opération césarienne,
 “ qu'il s'en fallut peu que les trois ou-
 “ vertures n'en fissent qu'une. Les
 “ symphyfes sacro-iliaques, déjà en-
 “ tr'ouvertes avec rupturé des ligamens
 “ & du périoste, au terme de vingt &
 “ une ligne d'écartement entre les os
 “ pubis, acheverent de se déchirer ;
 “ & le firent avec assez de bruit, pour
 “ que l'oreille de chaque assistant en
 “ fût frappée. On y mit facilement
 “ le pouce en travers.

N

“ Les

“ Les os pubis, après la sortie de la
“ tête, restèrent écartés de l’étendue
“ de trois pouces : leur écartement
“ avoit sans doute été plus grand au
“ moment du passage de celle-ci. L’an-
“ gle du pubis droit étoit distant du
“ centre de la faille du sacrum, de
“ deux pouces six lignes ; & l’angle du
“ pubis gauche, de deux pouces trois
“ lignes seulement : de sorte que la
“ largeur naturelle du bassin, confi-
“ dérée dans cette direction, s’étoit
“ augmentée de dix lignes d’un côté,
“ & de sept de l’autre*.”

* L’Art des Accouchemens, Tom. ii. p. 268, &c.

SECTION V.

DR. LEAKE, who is one of the latest authors on this subject, and the last, whose account of it I have seen and can of course review, introduces his observations in the following manner. “ Mons. Si-
 “ gault describes the section of the pubis,
 “ and proposes it as a substitute for the
 “ Cæsarian operation, the propriety of
 “ which, as well as the objections
 “ brought against it, I am desirous to
 “ examine with attention and candour;
 “ for little advantage can arise from
 “ opinions where men rather contend
 “ for superiority than truth. The
 “ spirit of enquiry is only commenda-
 “ ble, when it is exerted for the im-
 “ provement of science, and solely di-
 “ rected for the public good.” And
 Dr. Leake then adds, “ But although

“ I am inclined to think favorably of
“ this operation for reasons hereafter
“ assigned, I know that nothing but
“ time, and future experience, can
“ sufficiently determine, whether it
“ ought to be adopted or rejected.”

These sensible reflexions precede Dr. Leake's answers to the objections which he states, as having been brought against the operation; and as he is the only person, who in this country, has professedly written on the favourable side, and these answers are evidently intended to operate in positive support of the division of the symphyfis, by compleatly removing all objections; I am therefore desirous, of examining them with the same temper, which appears to have directed Dr. Leake in his researches, and particularly, as he recommends, with that “ commendable spirit of enquiry,
“ which has the improvement of
“ science, and the public good for its
“ immediate object.” In these sentiments therefore we join issue, but on
the

the particular subject of our enquiries, I have the misfortune, entirely to differ in opinion with Dr. Leake, for while he is “ inclined to think favorably of “ this operation,” I have insuperable objections to its adoption, and while he wishes for “ time and future experience,” I am convinced, that when Dr. Leake published his book, we were in possession of facts, sufficiently numerous and unfavorable, to warrant the absolute rejection of the operation.

Dr. Leake states the five following objections to have been brought against the operation, which he carefully examines and endeavours to remove.

“ *First*, that the cartilages may happen to be ossified.”

“ *Secondly*, that the neck of the bladder may be wounded.”

“ *Thirdly*, that the space gained by “ the section of the pubis, may not in a “ narrow pelvis, be sufficient to allow “ the child’s head to descend through “ the cavity.”

“ *Fourthly*, that the union of the cartilages may not be effected.” And

“ *Fifthly*, that the internal posterior ligaments, uniting the sacrum and illia, may be torn asunder, by dividing the bones of the pelvis.”

To these objections Dr. Leake answers, first, that cartilage being a substance essentially distinct from bone, is never found ossified but in a preternatural state, or in old age, after the time of child bearing is past, and when there never can be occasion for the operation. This is in general, undoubtedly true, but most unfortunately, in one of the cases, where the operation has been performed, this very accident did happen, for the symphysis was actually ossified in the woman at Wurtzburg, and the President Seibold, was obliged to divide it with a saw; and in one of the four women I saw opened after death, there was an irregular ossification, or exostosis in the symphysis, which prevented our cutting directly

directly through the cartilage. This is however of trifling consequence.

The second objection is, "that the neck
 " of the bladder may be wounded," to
 which Dr. Leake answers, that "as it
 " is slightly attached by cellular mem-
 " brane only, and not in close union
 " with the cartilage, there never can
 " be the least danger of wounding it,
 " except the operator is unskilful and
 " ignorant of the structure, and situa-
 " tion of the parts." A priori, the
 presumption is, to be sure, very strong
 in favour of Dr. Leake's answer, that
 this is an accident which could never
 happen, but from the unskilfulness or
 ignorance of the operator; and if we
 could always command a good anatomist
 and expert surgeon, who is in the habit
 of performing the operation, this accident
 might certainly be prevented; but there
 is a first time, that every person must do
 every operation, and what has happened
 to one, may reasonably be expected to

happen to another ; Monf. Sigault candidly acknowledges that he did wound the meatus, and it is not likely this operation should fall into better hands for the first time, than Mess. Sigault and le Roy, who had both been long engaged in considering it, and were much interested in the event ; this objection is therefore entitled to some, but I would readily own, no very great weight.

The third objection is, “ That the
“ space gained by the section of the
“ pubis, may not in a narrow pelvis,
“ be sufficient to allow the child’s head
“ to descend through the cavity.” This being an objection of the first magnitude, and if established, would infallibly preclude all benefit from the operation, Dr. Leake has very properly taken great pains effectually to remove it*. He states, that the opponents generally

* As Monf. Alphonse le Roy, and Monf. Roussel de Vauzefme had done before, and nearly in the same manner, the latter particularly thus expresses himself.

“ Si

nerally allow, that the space gained by the aperture, between the divided bones, is nearly two inches and a half, and he confirms it by a case at the Westminster lying-in Hospital, where a space of two inches and an eighth, was actually gained after death, when the parts were cold and rigid; and he has no doubt he says that such “additional space would in
 “ general be sufficient to let the child’s
 “ head pass, even in a pelvis so preter-
 “ naturally narrow, that no other means
 “ but the Cæsarian operation could be
 “ devised for its birth.” Dr. Leake then adverts to what has been observed he says by some, “that although
 “ the long axis of the pelvis may from
 “ thence be extended from side to side,
 “ its shortest diameter from sacrum to
 “ pubis, where additional space is most

“ Si una e tuberositatibus parietalibus, aut alia quæ-
 “ cunque pars capitis intra semotas pubes excipiat,
 “ tum capitis volumen ea portione sublata minuetur,”
 and again “magnitudine divisionis, quæ capitis par-
 “ tem haud exiguam debet excipere.” Lib. cit. p. 73,
 74.

“ wanted

“ wanted, will not be increased in the
“ same proportion, and therefore the
“ operation cannot avail.” This, he
observes, at first sight, looks like a specious objection, and he labours with considerable ingenuity and ability to remove the weight of it, in the following manner. He supposes that the space of two inches and a half between the divided ossa pubis, will be sufficient to receive the occiput of the child, as it presents at the symphysis, “ It will therefore follow, (Dr. Leake observes), that as
“ much of the occiput, or hind head
“ as is protruded into an aperture at
“ the pubis of two inches and a half,
“ so much precisely will be the space
“ gained by this operation, and super-
“ added to the short axis of the pelvis
“ from sacrum to pubis, which will
“ (as he afterwards takes notice) be equal
“ to the enlargement from side to side,
“ the circumstance here contended for.”

Fairness of argument obliges me to acknowledge, that the admission of the
occiput

occiput of the child between the divided ossa pubis is undoubtedly a diminution of the volume of the head, and is therefore precisely tantamount in effect to the enlargement of the short diameter of the pelvis. This circumstance I will therefore allow is fully proved. Yet I will venture to assert that, instead of deriving any advantage from the concession, this fact so apparently favourable to the operation, and which Dr. Leake contends so strenuously to establish, affords the strongest and most insuperable objection to the operation itself. For if any portion of the child's head, protrudes into the opening between the divided bones, the soft and contiguous parts must necessarily be compressed so long, with so much violence, between the solid wedge of the child's head on the one side, and the sharp edges of the divided ossa pubis on the other, that irreparable injury must be the almost infallible consequence to
the

the parts so compressed, but particularly to that most important part, the bladder, and probably to that portion of the cervix and os uteri which lies behind and in contact with it, but immediately before the head. It is therefore obvious, that whatever benefit is derived to the child by this means, must be infinitely more than repaid by danger to the mother, as will hereafter be abundantly confirmed by facts.

The partisans of this operation, must, as it strikes me, be reduced to this dilemma, if the ossa pubis cannot be separated wide enough to admit the occiput of the child, the space gained to the short diameter, will by no means be sufficient to permit it to pass alive through so small a pelvis as absolutely requires the Cæsarian section ; and then, the very end and intention of the operation, must be infallibly defeated ; or otherwise, if the separation of the ossa pubis be such, as to receive the hind head of the child into the aperture, and by that means

means it be born alive, irretrievable injury will probably ensue to the mother; her future comfort, perhaps her life may become the sacrifice.

The fourth objection “that the union
“of the cartilages may not be effected,”
although first suggested by such respectable authority as the Royal Academy of Surgeons at Paris, is compleatly refuted by experience.

The fifth, and last objection which Dr. Leake mentions, is, that “the internal posterior ligaments uniting the
“sacrum and illia may be torn asunder
“by dividing the bones of the pelvis.” To which he answers “respecting the
“pretended laceration of the internal
“posterior ligaments of the pelvis,
“uniting the sacrum to the illia, I
“must refer to the case at the Westminster Hospital, already recited,
“where the section of the pubis was
“made in the presence of sixteen medical gentlemen, and where notwithstanding the space gained was two
“inches

“ inches and an eighth, no laceration
“ or the least marks of violence appear-
“ ed, but on the contrary these liga-
“ ments were found perfectly firm and
“ in their natural state.” And Dr.
Leake supposes, that in the living sub-
ject, where “ the solids are more soft and
“ yielding,” even a greater space might
be gained without laceration to those
ligaments.

There is so much variety in the ac-
counts given, both of the space gained
by the section, and the consequent state
of the internal posterior ligaments, in
living and dead subjects, that it is im-
possible to reconcile them with each
other, or perhaps with truth, unless by
supposing, that there is a material diffe-
rence, in the original structure of the
posterior joints of the pelvis in different
women, either with respect to the in-
tervening cartilages, or connecting liga-
ments, or perhaps both. But most espe-
cially there is a material difference be-
tween the soft and relaxed state of these
parts,

parts, at or about the time of parturition, whether a few days before, or some time after it has taken place, compared with their natural strength and firmness at any other period of life. No satisfactory conclusions therefore can be drawn from experiments made in the dissecting room, or anatomical theatre, upon women, who have not died immediately preceding, during, or very soon after delivery.

Notwithstanding the variety mentioned above, and that in the woman at the Westminster Hospital, and in four other women I saw opened, (who died in the puerperal state), the ligaments were not at all lacerated, even when the ossa pubis were divided two inches and a half; and if we therefore admit that they may be capable of safely stretching, yet it is impossible for the ossa-pubis to be divided to that extent during life, without the illia being considerably separated from the sacrum, and that separation cannot be effected, without the inter-

tervening cartilages being detached from the bones; and acute pain must always accompany, and permanent inconvenience frequently succeed such violence; altho' in general perhaps, the *Vis medicatrix naturæ* may be sufficiently vigorous, under favorable circumstances of constitution to prevent irretrievable injury. In a good constitution, if the ligaments be not lacerated, a reunion will speedily take place, by a process common in animal bodies, and after a certain time, perhaps no material inconvenience may remain. This is conformable to observation; for in other joints, recent and apparently great injury incurred by violence to the cartilages and ligaments, where external air can have no admission, has been easily and speedily recovered. But in bad habits of body, or where the principle of life is weak, which is very generally the case with rickety and deformed women, the most untoward, troublesome, and even incurable complaints have ensued from much slighter accidents about joints than

than the separation of cartilage from bone. The mischief, which might probably ensue to the posterior joints of the pelvis, from the violent separation of the ossa-pubis, afforded, in the opinion of the opponents, the strongest objection upon theory, against this operation; I confess however, that facts have not confirmed those apprehensions concerning it; for though it may be entitled to some weight, we are certainly not warranted by experience to say, that it in general constitutes an essential objection.

Dr. Leake afterwards compares the section of the pubis, with the Cæsarian operation, and for many, and good reasons, gives the preference to the former; but unhappily, the two operations never can come into competition, for wherever the dimensions of the pelvis are such, as absolutely to require the Cæsarian operation; no additional space to be gained by the division, will be sufficient to ensure the delivery; otherwise there can

be no doubt of its being infinitely the safer and preferable operation.

I have in a former part of this work stated, what in my opinion, ought to be the dimensions of the pelvis to justify that operation; by which it must be evident, how utterly inadequate in such a pelvis, any space which can be gained by the division of the symphysis, will be, to effect delivery, with a probability of safety to the mother, or a possibility of safety to the child.

Last of all, Dr. Leake proceeds to answer “ those persons who vaguely “ object to the operation,” by telling them that it has already, and may again succeed with such, as are disposed to give it a fair and judicious trial, quoting from Monf. Le Roy several examples of success, and concluding with Professor Seibold’s case so often mentioned: of the circumstances attending and the event of those cases, particularly the last, I shall give an accurate account in another section, that a due estimate
may

may be made of the weight they are entitled to, in support of the operation.

As Dr. Leake is the only person in this country who has avowedly written on the favorable side, and as he has taken great pains, compleatly to obviate all the objections, I have been induced to examine with attention, and I trust with candour, his answers to the objections, and to consider at some length, whether his arguments are conclusive in favour of the operation.

I will now beg leave to offer to the consideration of my readers, some other objections, in addition to those stated by Dr. Leake to have been made to the operation, and which are indeed so obviously material, that I own I have been much surprized, that they should have escaped the notice of all the authors, who have written on the favorable side; neither Mess. Sigault, Le Roy, Camper, Dr. Leake, nor even Dr. Hunter, give the slightest hint concerning them. The foremost and most

essential, and which to my comprehension seemed an insuperable objection, was, the injury the parts contained within the pelvis, might suffer,

First, Accidentally by the knife, in the performance of the operation; but which they must afterwards inevitably suffer,

Secondly, By the violence in separating the ossa pubis after the section, and of necessity, tearing them away from the cellular connexion, which lines the pelvis, and which unites all the soft parts contained within the cavity, to those bones.

Thirdly. By the free admission of external air to all the contained parts, particularly to the bladder, and that perhaps for a considerable time, and to a considerable extent, than which, nothing is found to be more dangerous to all the cavities of the body, and their contents. External and cold air was never intended by nature, to penetrate into any of the cavities of the human body, they are therefore not prepared

pared to resist its influence, and it becomes of course particularly hostile to the contained parts, by creating inflammation; which not being restrained by a natural process as in external parts, extends over the whole cavity and contents, and is ever accompanied with great fever: often in the thorax, but generally in the abdomen, ending in gangrene and death; and even in less important cavities, the inflammatory symptoms, from that cause, always rise to a very alarming height.

Fourthly. By the unavoidable compression of these parts, against the sharp edges of the divided bones, in the forceable delivery of the child; parts, which in their natural state are extremely sensible, and irritable, and some of them even essential to life; and which, having been first torn from the bones, are now on the stretch from the division of the ossa pubis, and already injured by the admission of the external air. But if we further admit with the favourers

of the operation, the possibility of such a separation of the ossa pubis, as shall be capable of receiving the occiput of the child into the aperture, the soft parts (as * before observed), will be so compressed between the solid wedge of the child's head, and the sharp edges of the bones, that they must be utterly unable to resist so many complicated causes of mischief. Inflammation and fever to such a degree, as in most cases to end in gangrene, and sometimes in death, were therefore reasonably to be expected from this operation, and experience has too fatally confirmed our apprehensions.

The next objection is the possibility of the illia being anchylosed with the sacrum. I am ready to allow this is not a very probable objection, but if it should happen, it is irremediable.

The next and last objection that I shall mention, is, the small probability of saving the child, after all the pain and

* See page 190.

danger incurred by the unhappy mother. It is well known to the experienced reader, how precarious the preservation of the child is, even in a tolerably sized pelvis, in all preternatural presentations. The continued compression of the funis by the head in its passage through the pelvis, usually destroys the life of the child, where there is only a small deformity ; but infallibly, where the distortion is considerable, and where great and repeated force is required, to extract the child. This objection too, will be completely established by the event of the cases, to be immediately related, in the next section.

SECTION VI.

WHEN the division of the symphyfis pubis, was first announced in this country, the objections described in the last section, immediately, and forceably presented themselves to my consideration, as necessary to be removed, before we could be warranted in the adoption of the operation into general practice. From the splendid manner in which it was first introduced on the Continent, I had little doubt, but that we should in a short time, be in possession of facts sufficiently numerous to determine its real merit. I knew experience would very soon remove, or fully confirm those objections; and that to take up a hasty and insuperable prejudice,

judice, against any discovery, upon arguments of theory, however strong or reasonable, was disrespectful to the ingenuity of the inventor, inconsistent with candour, and discouraging every future attempt to improve the art. I waited therefore with becoming patience, to see whether those objections were removed, or confirmed by experience; in the mean time, sparing no pains to secure, as was my indispensable duty, every channel, through which it was in my power to procure such information.

It is more than five years since the first operation was performed at Paris, during which period, it has been repeated about five-and-twenty times, in different parts of Europe, but with very different success. As the merit of this new invention must be determined by the event of those cases, and the circumstances attending them, I will now beg leave to lay before my readers the particulars of each case, as far as they have

have come to my knowledge, or as they appear to me interesting in the recital, or important in the consequence.

I have collected the particulars of seventeen of the cases with tolerable accuracy; of the remaining eight, I have been able to procure no satisfactory information, not even of the event. How far the accounts are correctly true, no person in my situation can be answerable; I have not the slightest inclination to give a complexion to the cases, different from their natural tendency, but if I had, I must be infallibly precluded from the possibility of doing it, by giving the author's description in his own words. It is with infinite pain, and not without some indignation, that I have detected the most palpable perversion of the truth in the description of the circumstances of some, and even in the event of other cases; by which means, a favorable representation has been attempted to be imposed on the credulity of the
pub-

public, where the genuine symptoms, and real event, would have afforded the most conclusive evidence against the operation; than which, in an affair of this nature, surely, nothing can be more inexcusable. As far as mere opinion goes, every person may be allowed, innocently to indulge himself with visionary expectation of success; different persons see things through such different mediums, even in science, that very often, the wisest and best informed, differ *toto cœlo* in their opinion, and draw diametrically opposite conclusions from the same premises; insomuch that the correctness of the present age, always requires a faithful representation of experiments in philosophy, and of facts in physics, before any new doctrine, can be justified, or established. In an affair of so much consequence as this operation may be, to the unhappy individuals who are the subjects of such laborious parturition, to palliate, conceal, or in any manner, misrepresent the circumstances of a case, is highly culpable; but especially

cially so far to depart from the sacred obligation of truth, as to describe that event to be successful, which has in reality been fatal, is an offence so injurious to the interests of humanity, that it cannot in my opinion be too openly exposed, or too severely reprehended.

The first case of Mrs. Souchot is already described; Mr. Sigault has performed the operation four times since, in which he has lost *one woman and all the children*; so that Mrs. Souchot's was the only case, where the intention of the operation was compleatly answered, or where both mother and child were preserved; and as there appear some particular circumstances about her child, not described by Mr. Sigault himself, or known to the public, I will here beg leave to quote Mons. Baudeloque's animadversions upon Mons. Sigault's success in that case.

“ De cinq femmes qu'il a opérées,
 “ *une a été victime de cette nouvelle*
 “ *méthode; quatre enfans sont morts*
 “ *en-*

“ *entre ses mains, & il n’a pu sauver*
 “ *jusqu’ici que celui de la femme*
 “ *Souchot, peut-être n’est-ce que parce*
 “ *qu’il étoit très-petit, & que le bassin*
 “ *de cette femme n’est pas contrefait*
 “ *au dernier point*.*” And again, page
 259,

“ S’il est prouvé que l’enfant de
 “ la femme Souchot n’a dû le précieux
 “ avantage de naître vivant qu’à son
 “ peu de volume & à la souplesse des
 “ os du crâne, comme quelques-uns
 “ l’ont publié, la section du pubis,
 “ dans le nombre d’observations citées,
 “ n’a donc point encore eu de succès
 “ incontestables; puisque sans secours,
 “ l’enfant dont il s’agit, auroit pu
 “ jouir des mêmes avantages.

“ Nous avons vu cet enfant le trei-
 “ zieme jour de sa naissance, il étoit
 “ *fort petit, & sa figure présentait un*
 “ *caractère d’immaturité, tel qu’on l’ob-*
 “ *serve ordinairement aux enfans qui*

* L’Art des Accouchemens, Tom. ii. P. 233.

“ *naiss-*

“ *naissent au terme de huit mois, & que*
 “ nous l’avons remarqué sur plusieurs
 “ enfans de femmes qui avoient été
 “ rachitiques, & qui en avoient encore
 “ l’habitude extérieure.”

In some sort to confirm his opinion (just quoted) concerning the size, &c. of Mrs. Souchot’s child; Monf. Baudeloque observes (as mentioned above) that Mr. Sigault has not been able to preserve any other child, altho’ he has repeated the operation four times, and of which further notice will be taken in the sequel.

The next case where the division was performed, was at Mons in Hainault, by Monf. Cambon*, who in March 1778 performed this operation on a taylor’s wife, which succeeded perfectly well as far as related to the mother, but the child was born dead; indeed from Mr. Cambon’s own account, it was by no means indicated by necessity, and as

* See Lettre a Monf. Branvilla, Ecuyer, Premier Chirurgien de L. L. M. I. R. A. &c. Par Monf. Cambon, Ecuyer, &c. Mons, 1780.

he describes the funis presenting before the head, there was a very slender chance of the child being preserved in a small or deformed pelvis. It was therefore in my opinion inexcusable, thus wantonly to expose the poor creature to so tremendous an operation, almost without the possibility of an equivalent, notwithstanding Mons. Cambon describes her recovery in the following favorable manner, “ Cette femme n’eut pas le
 “ moindre accident de son opération, ni
 “ des suites de sa couche :” “ La malade
 “ urina à volonté quatre heures après
 “ son opération, ce qu’elle continua
 “ de faire naturellement, ainsi que ses
 “ autres fonctions, jusqu’à son entière
 “ guérison, qui arriva le premier Mai,
 “ & elle marcha dès lors, ainsi qu’elle
 “ fait aujourd’hui, comme si on ne lui
 “ eût jamais fait aucune opération*.”

His second case succeeded completely, and from the stature of the patient be-

* P. 11 & 12.

ing only 40 inches, it is presumable that her pelvis was very much deformed, but his description of it is so imperfect, and the whole case detailed in so loose and superficial a manner, that the necessity for the operation, is by no means established; however, both mother and child were preserved; and we are informed, that after the division, the child was extracted with the forceps; that the mother had some fever with tumor of the abdomen, &c. on the eighth day, which were cured by camphor, and which he recommends strongly in suppressions of the lochia, &c.

The third case described by Mons. Cambon, is a repetition of the operation upon the taylor's wife, who was the subject of the first case; and this being the only one extant, where the operation has been done twice on the same patient, and as it succeeded compleatly in preserving both mother and child, I will beg leave to present to my readers Mons. Cambon's
own

own account, of the peculiar circumstances, and favorable event of this case.

In performing the section, he observes†, “ le cartillage qui unit les
 “ deux os, je le trouvai plus ferme &
 “ beaucoup plus solide qu’à la première
 “ opération, & je l’estimai de la consis-
 “ tence des tendons, craignant avant
 “ même de faire l’opération, tant cette
 “ femme marchoit avec aisance & faci-
 “ lité, que les cartilages qui unissent
 “ les deux os ne fussent ossifiés.” “ L’é-
 “ cartement se fit avec moins de vitesse
 “ qu’à la première opération.” “ Elle
 “ n’éprouva d’autre accident *qu’une*
 “ *fièvre de vingt-quatre heures*, le dou-
 “ zième jour de son opération ; elle fut
 “ occasionnée par un rhume épidémique,
 “ dont presque toute la ville fut atta-
 “ quée : elle n’eut donc à cette seconde
 “ opération, comme à la première, *au-*
 “ *cune suite provenant de la symphyse ni*
 “ *de sa couche ; la plaie fut bien cica-*

† P. 22, 23.

“ *trifée le 12 du mois suivant & elle
 “ marche comme auparavant.*

“ L'enfant est aussi en parfaite santé,
 “ & la mere continue à le nourrir.”

The next operation was performed by Monf. Despres de Menmeurs, of St. Pol de Leon in Brittany*, upon Ann Berou, a soldier's wife, and it succeeded compleatly, as the account states, for both mother and child were preserved. It appears however, that if the operation was performed at all, it was performed unnecessarily, for the same woman was delivered naturally of a living child the next year†.

Upon what authority he does not state, but Dr. Weidmann says, the division of the symphysis was never performed in this case. “ Verum relatum

* Journal de Medicine, p. 428.

† “ rien ne prouve plus evidemment l'abus qu'on
 “ a déjà fait, de cette nouvelle operation. (Berou)
 “ *est accouché naturellement* 10 Juillet 1779, en pre-
 “ sence de plusieurs chirurgiens & medecins de la
 “ Marine de Brest.” Baudeloque, P. 257.

“ habe-

“ habemus, D. Despres *synchondrosin*
 “ *pubis nullatinus diffecuisse*||.”

The next case with which I shall beg leave to present the reader, is of much importance in determining the merit of this operation; for so different a description, has been given to the public by the favourers of the operation, of the circumstances attending it, from what was the real state of the case, that if candour requires us to believe, that the representation was not made with a design to mislead, at least, it must have happened from the most inexcusable negligence. It is one of the ten successful cases, related by M. Roussel de Vauzefine, which he describes “ as
 “ *commanding the assent, or silence of*
 “ *such, as are envious of this great dis-*
 “ *covery**.”

It may be necessary perhaps to apologize for the length of the quotation, but it is authentic, satisfactory, and im-

|| P. 30.

* P. 36.

portant: and exactly the same account was transmitted by the President Seibold (the operator) to Professor Richter of Gottingen and inserted in his *Bibliotheca Chirurg.* in the German language, and from thence transferred into another book, with the same title, published last year at Vienna†.

The president transmitted the same account to the Royal Academy of Paris, from which, some interesting particulars have been extracted by Mons. Baudeloque; and he also sent it to Professor Lobstein at Strasburg, which last was inserted in Dr. Bentely's Thesis; but by much the most minute description of the case was published by Dr. Weidmann in his *Comparatio*, &c. He had been present, and assisted at the operation, and was afterwards intrusted with the particular charge of the patient. All these accounts of course agree exactly in the description of the symptoms and

† See *Chirurg. Biblioth. Authore Steph. Hieron. de Vigiliis, Von Creutzenfeld, Phil. & Med. D. Vol. 2. P. 1289.*

event. They all state the *fever, inflammation, gangrene, fistula of the bladder, exfoliation of the ossa pubis, &c. &c.*

But as the account of this case published by Mr. Roussel, differs so essentially from all the other accounts, and so certainly from the truth, (in omitting every bad symptom); and as a specious complexion is given to the operation, from the colouring bestowed on it by the French relater, and the first partisans, (insomuch that Dr. Leake calls it a *successful* case, from the imperfect account of it conveyed to him by Dr. Hauseman of Brunswick,) I will entreat the reader's attention to the following extracts of the most material parts of the case, as most accurately related by Dr. Weidmann*.

* P. 34 to 51. I ought in justice to Dr. Weidmann to remind the reader, that this account is mutilated, by omitting every part (to shorten it) that was not thought essential; hence the apparent want of connexion will be understood, and pardoned.

“ Margaretha Markard ex Pfersdorf,
“ prope Kissingen, 35. annorum, sta-
“ turæ mediocris, fani habitus, ante 11.
“ annos nupta, septies peperit. Fœtus
“ sex naturaliter quidem, ast difficili,
“ pluriumque dierum labore enisa est;
“ septimum in frustra diuulsum chirur-
“ gi pagani industria extraxit.”—“ Ma-
“ num dein facile in vaginam inducit,
“ sentit promontorium ossis sacri ante-
“ rius adeo in pelvis cauum prominere,
“ vt *coniugatam lineam tribus uncis*
“ *vix maiorem esse existimet.*”—“ Præ-
“ sentibus igitur Professoribus Senft et
“ Medico Aulico Ehlen, tribus condif-
“ cipulis meis et me, parturiente nostra
“ in marginem lecti sua posita, ita vt
“ figi operanda possit, ossi vero coxigis
“ liber motus pateat.”—“ Cum vna
“ quarta modo cartilaginis pars discissa
“ est, ast circa cartilaginis medietatem
“ impingit operator in inexsuperabilem
“ cultro resistantiam, adhibet violen-
“ tiam.”—“ Fatigatus dein ultra me-
“ diam horam istis Encheiresibus fruf-
“ tra,

“ tra, persuasum habet, *reliquam me-*
 “ *diamque synchondroseos partem ossi-*
 “ *ficatam esse.*” “ Ego iussus a Cl.
 “ Præside meo ferrulam parum incur-
 “ uatum, globoso apice, ne lædat, mu-
 “ nitam accerso; hac, operator ossa pu-
 “ bis caute et secure, citra partium
 “ mollium læsionem discindit.”—Fini-
 “ tus ita *terribilis adeo partus*, et tanto
 “ impedimentorum confluxu difficilli-
 “ mus, in cuius decursu omnem artem
 “ viresque suas victas fore timuit Cla-
 “ rissimus præsides, et toties in nouam
 “ hanc operationem *se abreptum fuisse,*
 “ *partumque caesareum non anteposuisse*
 “ *doluit*, perpendens secum, foetum,
 “ licet viuus fuisset, per hæc angu-
 “ stias *seruata vita educi sane non po-*
 “ *tuisse.*

“ Primo ab operatione die pulsus fre-
 “ quens est, et durus, e vena brachii
 “ ad octo vncias sanguinis emittere
 “ iubet Cl. præsides. Eductus san-
 “ guis crusta phlogistica tectus est; lo-
 “ chia rite fluunt, in sinistro peluis

“ latere vterus durus sentitur, vrina
 “ adhuc contra voluntatem stillat.”

“ Sub vesperum pulsus celer 130es
 “ *intra minutum micans*, rubet facies,
 “ intumescit abdomen, vterus durus
 “ supra pēluim iacet, et parum dolet
 “ attactus, repetitur venae sectio.

“ De nocte symptomata inflamma-
 “ tionis perstant, cheirurgus excubias
 “ agens denuo venam aperit.”

“ 5ta. Vrina aliquoties sponte pro-
 “ fluxit, aegra in mouendo se situmque
 “ mutando summam difficultatem sentit,
 “ *et medium, a vertebis lumbaribus*,
 “ *corpus paralyticum quasi esse*. In
 “ vulnere pus, circa vesperum febris
 “ exacerbatio, maiorque ventris intu-
 “ mescentia, aegra et valde de *dolori-*
 “ *bus circa nates et ossa ilei*, eorumque
 “ *cum sacro iuncturam queritur*.”

“ Vrina praeter arbitrium adhuc ef-
 “ fluit; num id collo vesicae nimium
 “ distento, vel capite transeuntis foetus
 “ nimis compresso adscribendum? cul-
 “ tro laesio eiusdem facta non est) circa
 “ ves-

“ vesperum febris iterum mitior, dolor
 “ tamen vehemens circa pubem est,
 “ auctus attactu, *omnis urina prae-*
 “ *arbitrium effluit;*” “ Die 9na. situm
 “ aegra difficillime quidem mutans, cir-
 “ ca synchondroses iliosacras nihil ta-
 “ men vel doloris vel incommodi sentit.
 “ Inter deligandum ex *imo vulnere vol-*
 “ *sella saepius eximuntur gangraenosae et*
 “ *naturae viribus solutae membranarum*
 “ *particulae.*

“ Ioma. die ab operatione febris per-
 “ stat, mitis tamen, omnis fere urina
 “ cum pure per vulnus defluit, etiam
 “ dum aegra per viam ordinariam ean-
 “ dem emoliri nititur: concludit hinc
 “ carus Praeceptor meus, *urethram*
 “ *prope collum inflammata fuisse, hanc-*
 “ *que inflammationem in escharas gangre-*
 “ *nosas abiisse, viribus dein naturae ex-*
 “ *pulsas; solutis hisce escharis patuisse*
 “ *in vulnus iter urinae, quod non*
 “ *patuerat, donec solutae escharae non*
 “ *essent.*

“ I Ima.

“ iima. Febris eadem ac heri, ea-
 “ demque vrinae per vulnus profusio,
 “ iterum ex *imo vulneris fundo gan-*
 “ *grenosae membranarum lamellae vol-*
 “ *fella auferuntur, immissa per vre-*
 “ *thram et catheterem iniectio impe-*
 “ *tuosius pervulnus regurgitat.*”—“ *suf-*
 “ *picari igitur fas est, per distensiones*
 “ *diuulsionesque violentas pone vesicae*
 “ *collum natam inflammationem in gan-*
 “ *grenam cessisse, et vrinae patulum*
 “ *viam per vulnus dedisse.*—Ossa pu-
 “ bis, vbi difficilia sunt, scabra et ca-
 “ riosa, vulvae labia fero infiltrata
 “ sunt,” &c. &c.

It appears that this poor woman was
 so far recovered from the operation, as
 to return home the 2d. of April; but
 there remained a fistulous opening into
 the bladder, with occasional exfoliati-
 ons from the divided ossa pubis for near
 eighteen months; for Dr. Weidmann
 adds,

“ 18. Iulii 1779. visurus, an in
 “ vado omnino sint operatae nostrae
 “ res

“ res, egomet in pagum Pferfdorf iter
 “ facio: inuenio illam domesticis suis
 “ negotiis occupatam, suae spontis, et
 “ optime valentem; dicit, se saepius
 “ adhuc inflammatione circa opera-
 “ tionis locum correptam fuisse, imo
 “ et tum vrinam iterum per *vulneris*
 “ *fistulosam aperturam stillatim efflux-*
 “ *isse*; singulis vero vicibus remittente
 “ inflammatione exiuisse *ossicula exfo-*
 “ *liata*; ante tres menses vehementiore
 “ inflammatione se correptam fuisse,
 “ sub huius remissione fragmentum
 “ osseum ad vulneris orificium se
 “ offerens difficulter eductum fuisse, et
 “ post cessasse omnia mala symptomata.
 “ Vulnus probe nunc consolidatum est,
 “ rotunda cicatrix est et firma. Digito
 “ in vaginam immisso, videor mihi
 “ sentire callum esse molliorem, ossi-
 “ bus pubis discissis intermedium;
 “ operata etiam se tactu exploratam
 “ habere, ossa pubis immediate inter se
 “ *nunquam coniuncta fuisse asserit*; men-
 “ ses

“ ses rite fluunt, iis vero instanti-
 “ bus circa pubem dolor est.”

I will now beg leave to lay before the reader, just so much of the account of this case published by Mons. Roussel de Vauzefme, as will shew the intention of the relater in the clearest point of view.

After a general description of the operation, he concludes, “ *Non enim*
 “ *vesica, non urethra ullam jacturam*
 “ *passæ sunt. Exiguo admodum tempore*
 “ *sedata est inflammatio, nec gravis ullo-*
 “ *rum ingruit symptomatum series.*” P. 96

I am persuaded, every attentive reader will anticipate me in the reflexions this last assertion must suggest; in the name of humanity and common sense! if *fever, inflammation, temporary paralysis, and subsequent mortification of the bladder, ending in a fistula, by which the urine continued to escape for eighteen months, and during which period occasional exfoliations from the ossa pubis were frequently happening, are not to be called*
 ed

ed “*gravis symptomatum series*,” what train of symptoms not preceding death itself, can ever be considered *as grievous*?

The next case is still more tremendous, because it ended fatally both to mother and child; and here the misrepresentation is more palpable and inexcusable, but as it is possible that Mr. Roussel de Vauzefme may himself have been imposed upon, I will not impute to him so gross a violation of truth, as to suppose that he knew the genuine event of the case, for it was not announced in the first account; but I must beg the reader’s attention to the different descriptions. It is another of the ten cases which is included in his “*Huc usque res prospere cedentes.*”

“*Prope urbem Nemétum (Spire
dans le bas Palatinat) mulier vocata
Anna Maria Schmidrinn, jam per
tres continuos dies miserè puerperii
doloribus angebatur. Peritissimus
Chirurgus obstetricans D. Nagel cal-
lidè pelvis diametros explorat, & in-
ter-*

“ ternum ossis sacri parietem osseo tu-
 “ more sic asperum esse animadvertit,
 “ ut omnis spes partûs naturalis præci-
 “ deretur. Tùm assentientibus gravidâ
 “ proximisque (die quintâ Aprilis 1778)
 “ & præsentibus DD. Biernstiel, D.M.
 “ & Albert peritissimo Chirurgo, Sym-
 “ physis ossium pubis scalpro dividitur.
 “ Extemplò fermè, *vivus infans in lu-*
 “ *cem facillimè propellitur & paucis post*
 “ *elapsis diebus, tam benè sese habebat*
 “ *puerpera, quàm benè valere potest quæ*
 “ *partûs difficilis pertulit incommodum**,”

This is the account given by Mr. Rouffel, but here follows the genuine history†,

“ 5. April. anni eiusdem D. Nagel
 “ Cheirurgus Bruchsalienfis cum Doc-
 “ tore Berenstiel operationem hanc in-
 “ stituit in foemina, quæ tres maturos
 “ foetus, duos posteriores vero mortuos
 “ iam modo ediderat. Foetus inique
 “ facie dextrorsum situs, neque vltro
 “ vrgetur doloribus, neque versione,

* P. 97.

† Weidmann's comparatio, P. 30.

“ neque

“ neque forcipe prehendi potest. Post
 “ *dissectionem cartilaginis fit versio, ad-*
 “ *huc omnino difficilis. Foetus per ali-*
 “ *quot adhuc minuta vivere visus fuit.*
 “ *Aegra die post operationem octaua cum*
 “ *signis gangraenae, adhibita licet omni*
 “ *opera, fatis cedit. Exenteratio exhi-*
 “ *uit partes genitales externas sphacelo-*
 “ *sas, vrethram integram, telam cellu-*
 “ *losam sub ossibus pubis corruptam et*
 “ *sanie perfusam, os uteri gangraenosum,*
 “ *ut et interna et posterior facies uteri.*
 “ *Linea pelvis coniugata erat unciarum*
 “ *trium.*”

The next case which is to be related,
 happened at Arras, it was under the
 direction of Monsf. Retz, a physician of
 eminence, but Monsf. L'Escardé per-
 formed the operation, the following ac-
 count of it is extracted from Monsf.
 Rouffel*.

“ Hic Medicus parturienti fortè oc-
 “ currit quæ jamdiù propter pelvis an-
 “ gustiam diris afflictabatur tormentis.

* P. 104.

“ Ità vehementer tùm inflammatione
 “ correpta erant genitalia, ut in vagi-
 “ nam introgredi nequaquàm digitus
 “ posset ; jam de omnibus ferimè concla-
 “ matum erat, cùm sibi ad memoriam
 “ revocans illud Celsi monitum, fatius
 “ esse in re desperatâ anceps experiri
 “ auxilium quam nullum, à peritissimo
 “ Chirurgo Lescardè pubem dividi ju-
 “ bet. Cujus sectionis ope egressus ho-
 “ muncio, ad aliquot horas spiravit, &
 “ ad diem quintum usque supervixit
 “ mater. Quæ si protinùs non acta
 “ sint, nec miseræ præsto fuisset extre-
 “ ma-unctio, nec baptizatus infans.
 “ Nihilo-minùs Medicum tot clara per-
 “ agentem nefariè insimulant invidi,”

A long and very particular relation,
 of the dispute this case occasioned, be-
 tween Mess. Retz and L'Escardé, on
 one side, and all the physicians and sur-
 geons of Arras, on the other, as well
 as an accurate account of the appearances
 after death, authenticated by all parties,
 may

may be found in Monsf. Sue. Unnecessary * as this operation certainly was, and fatal as the event proved both to mother and child, Monsf. Rouffel (as the attentive reader will have observed above) like a true Frenchman and a good Christian, derives from this case some consolation to himself, and attributes some credit to Monsf. Retz, inasmuch as the child lived long enough to be baptized, and the mother long enough to receive extreme unction; it would be highly unbecoming, and indecent, to arraign the religious prejudices of any country, by endeavouring to lessen the merit of baptism to the child, or extreme unction to the mother, but I think the common sense of mankind, of all religions, and in all countries, must be shocked, at the concluding words of the quotation, where Monsf. Retz, for affording baptism to the child

* Monsf. Sue expressly says, "*le detroit du petit bassin avoit deux pouces, dix lignes.*" P. 342.

and for prolonging the mother's life long enough to receive extreme unction, is described as "*medicum tot clara peragentem.*"

Another case fatal both to mother and child, still remains to be related, which was attended with circumstances more complicated, and more perplexing, than any of the preceding ones. It happened at Dusseldorf, in May, 1778, of which two accounts have been published, one in French by Professor Guerard, the operator, and another in the German language, by Mr. Brinkmanns who was present; as I have not yet been able to procure, either the one or the other, the reader must be satisfied, with the following translation into Latin, extracted from Dr. Bentely's Thesis*, together with an account of the dissection of the body. " Instituebatur a Clar. " Guerardo maxima cum cautela, absque " ulla læsione alicujus partis non læden- " dæ. Sub operatione ramus quidem ar-

* P. 45.

“ teriæ pudendæ externæ dissectus san-
 “ guinem magna copia fundebat, quia au-
 “ tem applicatio digito statim cessabat.
 “ Inciso autem annulo ligamentoso ab
 “ antica sui parte pubis ossa jamjam se-
 “ parata animadvertiebantur, secedebant-
 “ que a se invicem aliquo cum crepitu,
 “ itaut intervallum inter pubis ossa ses-
 “ qui pollicem æquaverit. Diductis ita-
 “ que ad sesquipollicem pubis ossibus,
 “ protractoque in vaginam unopede alter
 “ erat quærendus, id, quod autem im-
 “ petrare haud potuerant, manus enim
 “ introductio in uteri cavum adhucdum
 “ impossibilis erat, quamobrem solius
 “ pedis extracti ope fœtus versionem
 “ tentarunt; quod etiam incassum erat,
 “ quippe fœtus caput semper immo-
 “ tum manebat: ut autem introitum
 “ in uteri cavum sibi compararent, sol-
 “ vere tentarunt femur ab ipso trunco,
 “ ut nempe apertura superior ab illo li-
 “ beraretur, atque manui introducendæ
 “ spatium concederetur, cumque femur
 “ a trunco abscedere deberet, crus a

“ femore sese separabat, ita tamen ut
“ femur in uteri cavum refundi potue-
“ rit : quo facto tunc omnia in vado
“ esse putarunt, dum manum per aper-
“ turam superiorem nunc facili negotio
“ ad alterum pedem usque demittere
“ potuerunt, sperarunt fore ut operati-
“ oni cito finem imponere, partumque
“ absolvere possent, at etiam hæc spes
“ fefellit, uteri enim contractiones tan-
“ ta urgebant vi, ut manum obstupescen-
“ tam quasi retrahere coacti fuerint.
“ Quod autem manum in uteri cavum
“ nunc demittere potuerint, non cen-
“ sendum est, ac si pubis ossa a sacro
“ antrorsum remota, conjugataque elon-
“ gata fuisset, sed id inde factum, quod
“ eminentia a dorso pollicis formata in-
“ tra pubis ossa a se invicem remota
“ collocabatur, spe sua itaque decepti
“ tentarunt adhuc forcipis applicatio-
“ nem, at itidem frustraneam, fœtus
“ enim capite nimis alte & oblique in
“ pelvi adhuc hærente.

“ In

“ In tantis rerum angustiiis ad ulti-
 “ mum tandem confugerunt remedium,
 “ *perforarunt nimirum cranium magno*
 “ *quidem cum negotio, effluente cerebro*
 “ *cranium paululum magis descendebat,*
 “ *unci applicatio locum non habebat nec*
 “ *non etiam forceps, & licet quidem ossa*
 “ *quædam a cranio abripiiebantur, caput*
 “ *tamen semper manebat immotum.*

“ Deficientibus autem versus vespere-
 “ ram matris viribus lecto componeba-
 “ tur ægra, quo etiam paululum refici-
 “ ebatur; noctu autem dum aliquid
 “ in vaginam descendere sentiebat, chi-
 “ rurgus tum temporis vigilias agens,
 “ accessit ad illam, caputque descendere
 “ animadvertens, fœtum mediocris mag-
 “ nitudinis extraxit, insequentibus spon-
 “ te sua secundinis. Et ita tandem fi-
 “ nita fuit hæc operatio.

“ Fœmina dein operatione finita vi-
 “ tam adhuc trahebat per decem dies,
 “ quibus effluxis animam expiravit.
 “ Admodum erat debilis & defatigata
 “ per decem hosce dies; venter mox

“ magis mox minus erat tumidus tur-
“ gidusque. Pulsus erat debilis & fre-
“ quens. De lochiis parum aut fere
“ nihil promanabat. Ægra vexabatur
“ singultu, tussis, quæ ab initio sicca
“ erat, humida tandem evadebat.
“ Quarto die suppurationis materiem
“ fundere incipiebat plaga. Urina,
“ quæ involuntarie destillabat, sexto
“ die retinebatur.

“ Deligationis apparatus admodum
“ laxè erat applicandus, nec etiam pu-
“ bis ossa penitus ad se invicem adduci
“ potuerunt, quod si enim fascia paulu-
“ lum firmitus adstringebatur, graves
“ admodum dolores in plaga sentiebat
“ ægra. Respirationis difficultas sensim
“ ingravescerebat, expectoratio evadebat
“ admodum difficilis, ita ut tandem
“ tantis vexata doloribus, tantisque op-
“ pressa ærumnis e vita decesserit.

“ Aperto cadavere secundo post mor-
“ tem die intervallum inter pubis ossa
“ reperiundum, atque sesquipollicem æ-
“ quans, *aliqua ex parte quædam vesicæ*
“ *portio*

“ *portio occupabat, quæ lividi coloris*
 “ *erat prouti etiam plaga; intestina*
 “ *aëre admodum erant distenta atque*
 “ *turgida, atque ea, quæ in viciniis uteri*
 “ *hærebant maculis fuscis erant obfessa.*

“ Uterus contractus parvum offerebat
 “ ulcus sinistro in latere, paululum sub
 “ vaginæ connexione cum uteri collo,
 “ materiesque purulenta effusa hærebat
 “ in pelvis cavo.

“ Aperto dein thorace pulmones ani-
 “ madvertebantur turgidi, sanguineque
 “ admonum repleti, colorem hepatis
 “ æmulantes.

“ Pelvis diametri nunc accuratius
 “ lustrari valebant, & quidem *conjuga-*
 “ *ta naturalis erat = $2\frac{1}{2}$ pollicum Pa-*
 “ *ris. eadem diameter ducta a promon-*
 “ *torio ossis sacri ad pubis ossa a se in-*
 “ *vicem remota duabus solummodo lineis*
 “ *erat major, transversa diameter 6 poll.*
 “ *Paris. & 2 lin. æquabat. Synchondro-*
 “ *ses sacro-iliacæ erant separatæ admo-*
 “ *dumque mobiles; illa lateris sinistri ma-*
 “ *jorem admisit separationem. Ligamenta*

“ *disrupta non erant.* Inferior apertura
“ nulla laborans vitio naturales serva-
“ bat dimensiones.”

I must now beg leave to revert to two of the operations performed by Mr. Sigault, as containing some circumstances too important to be omitted.

One patient named Vespres, died in consequence of the division of the symphysis; and upon examination after death, it appeared that great violence had been done to the sacro-illiac joints, and that there were, likewise evident marks of gangrene in the uterus, &c.

Mrs. Blandin, the other patient, who was delivered of a dead child by Mr. Sigault in 1779 by means of this operation, was, the following year delivered naturally of a living child by Mrs. Belami, a midwife at Paris, who had been sent for to attend her in consequence of Mr. Sigault's refusal, unless he was again permitted *to repeat the same operation* *. After reading an

* See Baudeloque, page 243.

account of the preceding dreadful cases, one cannot help feeling and lamenting the situation of this poor woman, who besides the present pain, and certain inconveniences attending the section, was cruelly exposed to the risque, of suffering in future, the most painful symptoms, and extreme danger, without the slightest reason, or the smallest necessity; and what is worst of all, not only, without deriving any equivalent, by the preservation of her child, but even involving its absolute destruction in her own danger, and all, to gratify a wanton predilection for this new-fangled operation !

The event of this woman's second labour must prove, one should suppose, even at Paris, the coup de grace to this new practice, notwithstanding the preposterous attempts of its partisans to prove, that this success was the effect of the former section*.

* See Page 257.

Monf. Alphonfe le Roy, having performed the operation twice himfelf, and published an account of both the cafes, with circumftances as (mentioned before) that Monf. Baudeloque fays, require for the fake of truth, that he even extends the limits of his work to give them a full examination. I fhall beg leave to tranfcribe his own words without making any reflection; the difpute was too interefting to pafs unnoticed in this review, becaufe it tends ftrongly to confirm my opinion, that all the partifans of this new operation, have been induced to think more favourably of it themfelves, and to wifh to make a more favourable impreffion upon the public opinion, than the thing itfelf will at any rate warrant; at the fame time I have no doubt, but that Monf. Alphonfe le Roy will feel himfelf called upon to anfwer Monf. Baudeloque, and will be able to remove the fufpicions fo injurious to his veracity.

“ Une

“ Une femme de vingt-huit ans,
 “ d’une taille de trois pieds trois pouces,
 “ grosse de son premier enfant, & fa-
 “ tigée, dit ce Médecin, *de dix-huit*
 “ *heures de souffrances*, fait le sujet de
 “ sa première observation.”—“ Après la
 “ section, les os *pubis* s’éloignèrent de
 “ *plus de deux pouces en se retirant sous*
 “ *les tégumens*, & leur écartement s’étén-
 “ *dit ensuite presque jusqu’à trois pouces*
 “ *en éloignant simplement les cuisses de la*
 “ *femme au moment où la tête devoit pas-*
 “ *ser*. On retourna l’enfant, & on le
 “ tira par un pied.”—“ L’enfant parut
 “ mort, mais il se ranima moyennant
 “ les secours qu’on lui donna. Il étoit
 “ fort gros, & sa tête avoit quatre pou-
 “ ces moins une ligne de diamètre trans-
 “ versal, ou d’une bosse pariétale à l’au-
 “ tre; *de sorte que*, dit M. le Roy, *au*
 “ *moyen de cette opération, j’ai passer*
 “ *quatre pouces moins une ligne sur un*
 “ *bassin qui n’avoit que deux pouces cinq*
 “ *lignes avant l’opération*. Vingt-huit
 “ jours après, la femme fut présentée à
 “ la

“ la Faculté, marchant seule, sans ap-
“ pui, & n’ayant aucune infirmité.
“ Elle commença à se lever vers l’épo-
“ que du neuvieme jour, & à marcher
“ au douzieme.”

“ Il paroît, d’après l’observation, qu’il
“ y a eu erreur de quelques lignes dans
“ l’estimation qu’on a faite du diametre
“ transversal de la tête de l’enfant au
“ moment même de l’Accouchement;
“ puisque le lendemain on n’a trouvé
“ *ce diametre que de trois pouces huit*
“ *lignes.* Nous présumons la même
“ chose de l’estimation des diametres du
“ bassin de la femme, & sur-tout de
“ l’écartement des os *pubis* au moment
“ du passage de la tête. On a publié
“ que cet écartement étoit alors de trois
“ pouces ou à-peu-près.” — “ Un pareil
“ écartement paroît trop extraordi-
“ naire, pour assurer aussi vaguement
“ qu’il a eu lieu ; & bien des gens croi-
“ ront peut-être n’atteindre au même
“ but que ce Médecin, qu’en éloignant
“ les os *pubis* à ce degré : s’ils *conser-*
“ *vent*

“ vent l'enfant par ce moyen, ils sacri-
 “ fieront la mere.

“ Sept jours après cette opération,
 “ M. le Roy la fit une seconde fois avec
 “ même succès, sur une femme du
 “ Gros-Cailloux, nommée *du Belloy*,
 “ dont la taille est de quatre pieds neuf
 “ pouces.”

“ Après la section, l'on ouvrit la
 “ poche des eaux, & l'on dégagea les
 “ pieds de l'enfant, qui se présentoit
 “ ent les premiers. On engraina dans
 “ la suite la partie postérieure de la
 “ tête entre les os *pubis*, qu'on avoit
 “ écartés de trois pouces en éloignant
 “ simplement les cuisses de la femme
 “ le plus qu'il avoit été possible ; & l'on
 “ obtint la sortie de l'enfant sans de
 “ grandes difficultés. On observe que
 “ le diametre *transverse* de la tête étoit
 “ de trois pouces huit lignes.”

“ La femme *du Belloy* éprouva des
 “ douleurs très-vives après l'opération :
 “ mais elles furent de courte durée,
 “ car dès le lendemain cette femme se
 “ por-

“ *portroit très-bien.* On la changea de
 “ lit tous les jours : sa plaie se trou-
 “ va *cicatrisée dès le cinquieme* : elle
 “ *marcha au dixieme, & fut à l'Eglise*
 “ *le dix-septieme.* On ajoute que
 “ plusieurs médecins, du nombre des-
 “ quels étoit M. *Chaptal* de la Faculté,
 “ & de l'Académie des Sciences de
 “ Montpellier, n'ont pu voir cette
 “ femme au cinquieme jour, sans une
 “ *sorte d'admiration*.*”

Mons. Baudeloque describes two other
 unfortunate cases ; in one, Mons. Bon-
 nard at Hesdin first performed the divi-
 sion of the symphysis, and afterwards
 the Cæsarian operation, *the mother died,*
 but the child was preserved ; in the

“ * L'étonnement & l'admiration de M. *Chaptal*,
 “ furent en effet très-grands ; car le lendemain &
 “ long-temps après, il doutoit encore que l'opération
 “ eût été faite, & qu'une femme aussi-bien conformée
 “ que la *du Belloy*, eût un bassin aussi difforme qu'on
 “ lui avoit annoncé. Cet exemple ne lui en a point
 “ imposé, & le Médecin de Paris n'a point converti à
 “ son opinion le Médecin de Montpellier.”

other

other case, which happened at St. Omer's, the mother lived, but *the child died**.

These are all the cases, where I have been able to procure any information concerning either the circumstances attending the operation, or even the event of it. Mr. Roussel de Vauzefme mentions, that the operation had been likewise performed at Franckfort in Germany, at Constantinople, at La Ferté au-Vidame (Firmitati Vicedomini), and Beaunierres en Artois. It has been performed once in Spain by Mr. Cannivell with success, as Dr. Duncan relates after his account of Dr. Leake's book, and I understand, it has been since performed twice in Holland.

It appears from this review, that out of seventeen cases, *five women have died and ten children*, so that as Mons. Baudeloque observes, "chaque operation " a eu presque sa victime," admitting

* See Page 276.

that

that these seven children could not have been otherwise saved, *five women* have been absolutely sacrificed for their preservation, for there does not appear from the acknowledged dimensions of the pelvis, any necessity for the operation in a single instance. Mons. Cambon's second case, from the short stature of the woman, and the probable distortion of the pelvis, together with the complete success both to the mother and child, seems almost the only unexceptionable evidence of the efficacy of the operation, or is the single instance where some suspicious circumstance has not arisen to invalidate the truth of the relation, or very much to lessen the merit of the practice.

CONCLU-

CONCLUSION.

IT had been part of my original plan in this essay, to give an historical detail of all the Cæſarian operations, which have been performed of late years in Europe; but to have taken ſuch a review, as would have fulfilled this intention with becoming accuracy, or to any uſeful extent, I ſoon found, required more time and leiſure, than I could at this ſeaſon ſpare from my other engagements, and at all events, muſt have protracted the publication, and further enlarged this work, already unavoidably extended much beyond the intended ſize.

But as I have all through this eſſay, holden opinions, concerning that operation, (expreſſed in ſtrong language),

R

very

very different from many foreign authors of high reputation, but particularly differing from the opinions and expressions in the last book on the subject, published in this kingdom, by a professor of midwifery in the first school of medicine in the world*. I knew it would be required of me, and indeed, that it was an instance of respect, due to the character, and station, of that author, not to pass unnoticed, those opinions, concerning which I have the misfortune to differ, *toto cœlo*, from Professor Hamilton.

I have all through this essay, mentioned the Cæsarian operation as certainly fatal, and the delivery by the crotchet as perfectly safe. I was not however to be informed, that the first had succeeded in one or two recent instances on the Continent, nor that the latter had proved fatal in

* Elements of the Practice of Midwifery. By A. Hamilton. Edinburgh 1775.

a very few instances in this country. But I trusted, that the general event of the practice in both cases, so very nearly corresponded with that idea, as fully to justify both the opinion and expressions.

Having considered with all possible attention, the nature and probable consequences of the Cæsarian operation, and having carefully examined all the accounts published of it in Europe, I own, I was most exceedingly astonished, at the following observations of Professor Hamilton; speaking of the necessity for this operation, he says most truly, “ that it is a dreadful and hazardous expedient ;” but he then adds, “ which if *timely and prudently conducted*, notwithstanding the many instances where- in it has failed, may be *performed with great probability of success*.” And again, “ There are on record *above seventy well-attested histories*, wherein it (the Cæsarian operation) has been *successfully performed*; for of all the

R 2

“ cases

“ cases related by authors, it has not
 “ *proved fatal to the patient above once in*
 “ *nine or ten instances*; which evidently
 “ shews the propriety of the practice,
 “ and probability of success, both in
 “ regard to the mother’s own recovery,
 “ and for certainly preserving the life
 “ of the child*.”

With respect to this assertion concerning the general event of the Cæsarian operation, I beg leave to say, that the Professor must have derived his information, thro’ channels very different from those which have been accessible to me; or he is by no means warranted in his conclusion. For except the very first, the *most favorable accounts* of this operation, instead of confirming the truth of Professor Hamilton’s assertion, “ *that it has not proved fatal to*
 “ *the patient above once in nine or ten in-*
 “ *stances,*” precisely reverse the fact, declaring, that *only one woman out of*

* P. 242 and 251.

ten has escaped. Monf. Baudeloque, the lateſt author on the ſubject, and who ſeems ſufficiently inclined to favour it, ſays this expreſsly, “ *L’operation cæſarienne eſt ſi dangereuſe pour la femme, qu’à peine ſur dix, il en echappe une a la mort†.*”

I cannot permit myſelf to believe that Mr. Hamilton could mean to refer to the early accounts of this operation, for they are altogether ſo improbable, the facility, with which in them, it is ſtated to have been performed, often, by the moſt ignorant and unſkilful perſons, its general ſucceſs under circumſtances the moſt hazardous, and alarming, in the patient, and under treatment, the moſt injudicious on the part of the operator, the ſubſequent ſymptoms, ſo favorable, and different, from what have been uniformly obſerved in every recent and well-attesteſt caſe, but eſpecially *the frequent repetition of it upon the ſame ſubject*, all concur, to render it impoſſible,

† L’Art des Accouchemens, Vol. II. p. 219.

without credulity in the extreme, to regard such cases as authentic facts, upon the authority of which, we are to direct our future practice, or justify ourselves in the performance of so tremendous an operation. But even admitting the truth and weight of these relations, yet, however successful it may have proved in other climates, and former times, at least we know with certainty, that in this country; and this age, (whatever the alteration of circumstances may be) it has *proved fatal in nine successive cases**, the whole number, in which it has been performed in this kingdom, and I think, considering where, and by whom the operation was done, Professor Hamilton will hardly venture to say, that

* Viz. twice in London, five times at Edinburgh, and once at Leicester, (accounts of all these cases have been published) ; but it has been performed once since, in Northamptonshire, by Mr. Clark, then of Wellengborough, but now living in London, assisted by Mr. Mansfield of Thrapston, both able surgeons, and particularly eminent in that part of the kingdom for their skill in midwifery.

at least some of the cases were not “time-ly and prudently conducted.”

The following quotation from the same book, while it excites my astonishment, demands particular notice, because it directly contradicts the principal intention of this essay.

“ In the city of London, during the
 “ course of the last hundred years, of
 “ *above fifty women* that have presented
 “ to the different practitioners and in
 “ the different hospitals with narrow
 “ pelvis’s; that is *from one inch*, to
 “ little more than two at the widest
 “ diameter; *no more than four or five*
 “ *of this number have been saved*, and
 “ the whole of the children have been
 “ destroyed; whereas had the (Cæsari-
 “ an) operation been performed, fright-
 “ ful and hazardous as it is, *many of*
 “ *these unhappy women*, with their chil-
 “ dren, would have been preserved†.”

With respect to this quotation, I beg leave to assure the learned, and

† Page 242.

ingenious author, that concerning the event of the cases of the most deformed pelvis's in this city, (not however "*of one inch diameter,*" for I know of none such, but the smallest, of which any account can be procured), he has been altogether misinformed in point of fact; for, from my own experience of five-and-twenty years, as well as upon the most accurate information which, as it was my indispensable duty, I have made my particular business to procure from others, I will venture to assert, that instead of *only four or five women being saved out of fifty, the proportion is at least reversed,* and the number stated in the quotation to be saved, is at the utmost, the number lost. One chief intention of this essay, was, to endeavour to diminish at least, if not absolutely supersede, the necessity, of the Cæsarian operation, and to substitute the use of the crotchet, in its stead; to effect this purpose, I have repeatedly insisted upon the acknowledged fatality of that operation, and
the

the comparative safety of the crotchet, and I have endeavoured to demonstrate upon principle, and confirm by experiment, the possibility of the successful application of that instrument, in very many of those deformed pelvis's, where that fatal operation has usually been resorted to, and is still invariably recommended†. But, if only one woman has been lost out of ten by the Cæsarian operation, and only one out of the same number saved, where the crotchet has been used; if this direct, or implied representation of the event of the two methods, given by Professor Hamilton *be true, mine must be false*; and if the prac-

† See, quoted before, Stein, Levret, Baudeloque, Roederer, Saxtorph, and last of all Professor Plenck (Elem. Art. Obstet. Viennæ 1781, p. 212), who speaking of the Cæsarian operation, says expressly, Indicatur

1. “ Quando diameter conjugata in pelvis introitu
“ 3 pollicibus est angustior, et fœtus vivus, &c.

2. “ Quando conjugata superior pelveos duobus
“ pollicibus est minor, etsi fœtus ad sit mortuus. In
“ hac enim pelvis angustia, excerebratio, & extractio fœ-
“ tus maturi impossibilis est.”

tice

tice he recommends *be right, mine must be obviously, and ruinously wrong*. But as I am persuaded, Professor Hamilton has been betrayed into a hasty opinion, in one instance, from want of the best information, and in the other, from actual misinformation, so I trust, that upon this suggestion, his candor and maturer judgment will lead him at least to correct, if not altogether retract an opinion, demonstrably ill-founded; an opinion too, not upon a speculative point, or of a trivial nature, but of the first practical importance, involving in its probable consequences the dearest interests of humanity, and than which, nothing may eventually be of greater moment, to those persons, who, from extreme deformity, unhappily become the objects of its influence.

Before I conclude, I will beg leave to recapitulate, and collect into one point of view, the subjects which I have considered, and the positions which I have attempted

attempted to establish, in the preceding essay.

First. I have endeavoured to demonstrate the physical necessity of the superior difficulties of human, to comparative parturition, even in natural labour, from the difference between the erect, and horizontal position of body; and particularly the effects of that difference in creating laborious parturition, the subject of this essay, which is therefore unknown to the quadruped.

Secondly. I have endeavoured to prove; that a child at full maturity, cannot be born alive, by any means of nature, or art, through the natural passage, where the dimensions of the pelvis are not *two inches and three quarters from pubis to sacrum*; therefore, that in all such cases, the head of the child must be lessened, and being lessened, I have endeavoured to demonstrate, that it may be safely extracted by the crotchet, wherever there is a space equal to *one inch and a half from pubis to sacrum*, dimensions much less, than
what

what have invariably been supposed to require the Cæfarian operation, even in the latest and best books.

Thirdly, I have endeavoured to establish the preference of this method by a comparative estimate of the two lives, unhappily, but unavoidably placed in competition.

Lastly. The lamentable necessity of such violent means being established, I have endeavoured to prove the utility of opening the child's head as early as possible, and of delaying the subsequent delivery at least thirty hours, in order to induce putrefaction, and thus facilitate, and render more safe, the future extraction by the crotchet; and by attention to these circumstances, I have asserted, and experience confirms the assertion, that delivery by the crotchet may always, be effected with perfect safety to the mother.

In the second chapter I have collected together what appeared to me, the most curious, or essential parts of several books published on the division of the symphy-

fis,

sis, in the manner of a review or historical detail.—I have particularly stated the objections to the new operation, and taken, what I thought, the most satisfactory manner of confirming those objections, by putting my readers in possession of the history, and event of all the cases, where it has been actually performed, and which together, have induced me to give a decided opinion against the operation.

I will now only beg leave to add, that wherever I have had the misfortune to differ from others in opinion, I have meant to express myself towards them with candour and civility, conscious, on many accounts, of much needing, and therefore hoping and claiming, the same indulgence; but having no predilection for the opinions advanced in the preceding pages, further than as they appear, to be founded in truth, and connected with the interests of humanity, or the general welfare of society, I am ready, most cheerfully to surrender one, or
all

all of them, upon conviction of error, endeavouring to adapt my conduct and feelings to this admirable controversial maxim, REFELLERE SINE PERTINACIA,—REFELLI SINE IRACUNDIA.

P. S. Since the last sheet went to the press, I have been favoured with Dr. Krapf's (Physician to the late Empress) experiments, and remarks, on the supposed dilatation of the pelvis, in natural labour, and the division of the symphysis pubis in laborious labours. It does not appear, that this operation has ever been performed on the living subject at Vienna. Dr. Krapf's experiments, however completely establish a theoretical objection very early suggested against the practice, viz. the probable injury to the posterior joints of the pelvis; and they likewise prove that an anchylosis be-

† Anatomische Versuchi, und Anmerkungen. Car. von Krapf. Vien. 1781.

between

tween the illia and iacrum, is very far from an uncommon circumstance, even in the youngest child-bearing women, from twenty, to thirty years of age, as stated before, and which must, wherever it exists, prevent all possibility of benefit from the operation.

I find by conversation with the ingenious Dr. Loder, of Jena, since his visit to Paris, and his knowledge of the event of the cases related in the last section, that he has abated much of that enthusiasm for the division of the symphysis, which he has expressed in his thesis, altho' he does not entirely acquiesce in the opinion with the author of this essay, that "*no circumstances whatever can render it a warrantable operation.*"

F I N I S.









